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Editorial



"Don't limit your challenges, Challenge your limits"

Dear Aspirants,

We feel great pleasure in bringing the 'April 2018' edition of our very own 'Masters in Current Affairs', a platform where you get all the exam related information at a single place. It is designed especially for the forthcoming examinations. Its regular sections such as News Maker, News Diary, One liners etc. cover each and every news in details which is important for examinations. Rest of the news are covered in 'Chalte - Chalte' i.e. one liner news, which you can find at the bottom of each page.

On 1st February 2018 our Union Budget was presented by Finance Minister Arun Jaitley. This was the fourth budget by the Union Finance Minister which emphasis on agriculture and healthcare. Some major steps taken are: Implementation of MSP for all crops. A flagship National Health Protection Scheme will be started to cover 10 crore poor and vulnerable families. Under the other focuses of government, Ujjwala Yojana will be expanded to eight crore households. The Saubhagya Yojana will be a point of focus for the government. The detailed summery of Union Budget 2018-19 is given in this edition.

Another Major scam was witnessed by the nation in the banking field is the 11,300 Crore fraud by Jewelry designer Nirav Modi. India's Punjab National Bank (PNB) stated recently that it has detected fraudulent transactions worth over Rs 11,300 crore at its Mumbai branch. This incident shocked the entire nation as this is the biggest fraudulent case after Vijay Malya. A detailed analysis of the entire case is given in the economy section of the New Diary.

In this edition we are providing solved paper of CDS (I), 2018 which was held on 4th February 2018. There is a separate section named Que-TM for your self-evaluation, which includes all the possible MCQ's from this month's current affairs. MCQ's from Union Budget and Economic Survey are also included in the Que-TM section. This will be highly beneficial for all the upcoming examinations.

Your advice or suggestions will be much appreciated and welcomed.

With Best Wishes

Mahendra Publication Pvt. Ltd.

"Your Success is Our Success"

PERSONAL DETAILS

Ayush Agarwal

Father's Name : Anup Kumar Agarwal

Mother's Name : Anupama Agarwal

Hobbies : Playing cricket, Watching Movies, Playing Sudoku

Prior Selection : This is my first selection

Name of the Exam : Nainital Bank & Federal Bank (PO)

Roll No. of Qualified Exam : Nainital Bank : 1913001123

Federal Bank : 3201130297

Roll No. of Mahendra Institute : PDH0271354628



MICA : How did you prepare for the examination?

AYUSH :

English Language

Daily Newspaper reading and English classes at the institute helped a lot in this section.

Reasoning Ability & Computers

Mahendra's classes and regular practice.

Data Interpretation

All the basic concepts were cleared during the classroom sessions and then with regular practice you can clear this section.

General Awareness

For current affairs MICA, Competition booster are enough for the preparations.

MICA : How about "Master in Current Affairs" Magazine and Mahendra Guru Website?

AYUSH : The website and Magazine both are excellent. It covers all the examination related aspects at a single platform. Here you will get everything important for examinations such as Current affairs, Study Notes, Previous year papers, solved papers and a lot more.

MICA : What is the best thing about our coaching institute, according to you?

AYUSH : The best thing about this institution is the 24*7 availability of the faculties. They are ready to solve all your queries anytime, which is great.

MICA : What is the role of "Time Management" in one's success?

AYUSH : Time management helps in arranging and managing things perfectly. It contributes to the overall development of the personality.

MICA : How did you prepare for the Interview?

AYUSH : I prepared for the Interviews through the mock interview sessions organized by Mahendra's.

MICA : Tell us about the Interview Board and the questions asked?

AYUSH : The interview board was friendly and most questions were from the family background, Graduation related and Banking related.

The questions asked were:

(I) Why did you choose banking after doing B.tech?

(II) What is NEFT, RTGS and IMPS?

(III) Any location preferences?

(IV) What is your Father's profession?

MICA : By whom did you get information of your selection and what was your reaction?

AYUSH : I received the information from the bank's website and I was extremely happy.

MICA : What message do you want to convey to other aspirants?

AYUSH : Work Hard and Pursue your dream.

MICA : Congratulations once again on your success. Your success is our success.

AYUSH : Thank You Mahendra for guiding me to Success.

MICA : Mahendra's family expresses its heartiest congratulations on your success.

AYUSH : Thank You so much.

MICA : To whom do you want to give the credit of your selection?

AYUSH : First of All my parents and then to the excellent faculty of Mahendra's.

MICA : After how many attempts did you succeed in examination?

AYUSH : This was my 1st attempt.

MICA : What is the role of Mahendra's institute in your selection?

AYUSH : Mahendra's helped me in understanding the basic concepts of Banking, which are really beneficial throughout the selection process.

ONE Liner

PERSON IN NEWS

- ✍ Who has been appointed as the coach of the Delhi Daredevils franchise for the upcoming IPL 2018?
♦ **Ricky Ponting**
- ✍ Who has been chosen for the prestigious Pandit Bhimsen Joshi award? ♦ **Manik Bhide**
- ✍ What is the name of Pakistan Air Force Ex-chief and veteran politician who has passed away recently?
♦ **Asghar Khan**
- ✍ Who has appointed as General Manager of the BCCI?
♦ **Saba Karim**
- ✍ Who has appointed as Director General of National Cadet Corps?
♦ **Lt Gen B.S.Sahrawat**
- ✍ Name the person, whom has been appointed as the head of Indian Council of Cultural Relations (ICCR)?
♦ **Vinay Sahasrabuddhe**
- ✍ Who has been appointed as the Foreign Secretary of India?
♦ **Vijay Keshav Gokhale**
- ✍ Name the person, who was appointed as the new Deputy National Security Adviser (NSA)?
♦ **Rajinder Khanna**
- ✍ Who took oath as the new Chief Minister of Gujarat?
♦ **Vijay Rupani**
- ✍ Who took oath as the new chief minister of Himachal?
♦ **Jai Ram Thakur**
- ✍ Indian Space Research Organisation (ISRO) has appointed K.Sivan as the -----
♦ **Chairman**
- ✍ Who has been appointed as the Managing Director (MD) and Chief Executive Officer (CEO) of the National Payments Corporation of India (NPCI)?
♦ **Dilip Asbe**
- ✍ Partha Mukhopadhyay died recently, he was an -----
♦ **Actor**
- ✍ Who has awarded with Sahitya Akademi Awards for Sanskrit novel "Gangaputradanam"?
♦ **Niranjan Mishra**
- ✍ Anwar Jalalpur who died recently, belongs to which field -----
♦ **Poet**
- ✍ Legendary astronaut ----- who walked on the Moon and also has commanded the first space shuttle flight, whom has died recently?
♦ **John Young**
- ✍ In which international organization Peter Sutherland belongs, who died recently?
♦ **WTO**
- ✍ Shrivallabh Vyas belongs to which field?
♦ **Actor**

AWARDS

- ✍ Who became the first African-American to win 75th Golden Globe Award for best actor in a drama television series?
♦ **Sterling K Brown**
- ✍ What is name of Indian origin actor who has been awarded with the Best Actor in Golden Globes awards?
♦ **Aziz Ansari**
- ✍ Which temple has been named the cleanest iconic place in India under the 'Swachhata Hi Seva' Programme?
♦ **Meenakshi Temple**
- ✍ Which state has won the 'Best Tourism State' national award?
♦ **Madhya Pradesh**
- ✍ Who has topped the prestigious Foreign Policy magazines 50 Leading Global Thinkers list?
♦ **Kamala Harris**
- ✍ Who will be awarded a D. Litt. degree from the National Institute of Technology (NIT), Agartala?
♦ **Dipa Karmakar**

- ✍ Who has been honoured with the People for the Ethical Treatment of Animals' (PETA) 2017 Person of the Year Award? ♦ **Anushka Sharma**
- ✍ Which Indian Premier Container Port has won the 'Samudra Manthan - Caring Organisation of the Year' award? ♦ **Jawaharlal Nehru Port Trust**
- ✍ Who has been honored with the first Mufti Mohammad Sayeed Award for his Probity in Politics and Public Life? ♦ **Nitish Kumar**
- ✍ Who has won Broadway World India Awards 2017 for Best Ensemble Cast? ♦ **Shapoorji Pallonji and NCPA**

SCHEMES AND LAUNCHES

- ✍ Which ministry has launched a new program SAMEEP? ♦ **Ministry of External Affairs**
- ✍ e-HRMS is launched during the observance of ____ ♦ **Good Governance Day**
- ✍ Which Union minister has recently launched Livestock Disease Forewarning –Mobile App? ♦ **Radha Mohan Singh**
- ✍ AP Fiber Grid Project was recently inaugurated by the President of India. It is related with ____? ♦ **High speed internet**
- ✍ In context to recently launched NARI scheme. What does 'R' stands for in 'NARI'? ♦ **Repository**
- ✍ 'NARI' portal is related with: ♦ **Women empowerment**
- ✍ Which portal was launched by government for connecting breeders and farmers of indigenous breeds. ♦ **e-Pashu Haat**
- ✍ Which ministry has launched SFOORTI application ? ♦ **Ministry of Railways**
- ✍ Who has inaugurated the new stretch of Metro line in New Delhi? ♦ **Narendra Modi**
- ✍ The recently inaugurated new stretch of Metro line in New Delhi connects which two station? ♦ **Botanical Garden and Kalkaji Mandir**

- ✍ First Ever Broad Gauge Air-conditioned AC EMU has been introduced in which city recently? ♦ **Mumbai**
- ✍ Assam recently launched skill development training centers across the state. It is organised by which department? ♦ **Department of Skill, Employment and Entrepreneurship**
- ✍ In context of FAME India Scheme, what does 'F' stands for? ♦ **Faster**
- ✍ Which ministry has launched a Regional Project to Tackle Stubble Burning? ♦ **Ministry of Environment**
- ✍ A high-level task force has formulated the 12 point draft 'Air Action Plan-Abatement of Air Pollution in the Delhi NCR'. Who will head this task force? ♦ **Nripendra Misra**

NATIONAL & STATE

- ✍ Who is the nodal agency for implementation of the Ganga Gram Project? ♦ **Ministry of Drinking Water and Sanitation**
- ✍ Atal Innovation Mission (AIM), selected additional ____ Schools for establishment of Atal Tinkering Labs (ATLs) ♦ **1500**
- ✍ Ministry of Shipping has exempted the requirement of biometric enrolment. The exemption is for the period of _____. ♦ **Three years**
- ✍ In which city, establishment of new AIIMS has been approved by the government recently? ♦ **Bilaspur**
- ✍ Which ministry has proposed rolling out of e-Sansad and e-Vidhan in State Legislatures? ♦ **Ministry of Parliamentary Affairs**
- ✍ In which City 18th All India Whips' Conference was held recently? ♦ **Udaipur, Rajasthan**
- ✍ Zojila pass is located in which state? ♦ **Jammu & Kashmir**
- ✍ Kerala government and fertilizer major FACT signed an MoU for setting up petrochemical park in which city? ♦ **Kochi**

CURRENT AFFAIRS

One Liner

- ✍ India's second largest rooftop solar power plant has been commissioned in which state?
♦ **Uttar Pradesh**
- ✍ Which state has become the second state in the Northeast to be declared Open Defecation Free?
♦ **Arunachal Pradesh**
- ✍ Arunachal Pradesh government has launched Swachh Arunachal Mission. The mission was launched on ____
♦ **2 October 2017**
- ✍ Which state government is going to form an education board for non-English medium schools?
♦ **Maharashtra**
- ✍ Recently Which state government has banned the use of electronic cigarettes?
♦ **Bihar**
- ✍ Which State has become the first State in India to launch High Risk Pregnancy (HRP) Portal which helps in early identification of high-risk pregnant cases?
♦ **Haryana**

INTERNATIONAL

- ✍ With which country India has signed MoU to improve Public Transport in India?
♦ **UK**
- ✍ In which country ASEAN India Pravasi Bharatiya Divas was held recently?
♦ **Singapore**
- ✍ US has announced to withdrew itself from which agreement recently?
♦ **Paris Climate Deal**
- ✍ Which Country's Navy has successfully test-fired the 'Harba' Naval cruise missile?
♦ **Pakistan**
- ✍ With which banks Air India has tied up to acquiring three Boeing 777 aircraft?
♦ **Standard Chartered Bank, First Abu Dhabi Bank & Mashreq Bank**
- ✍ India signed a Memorandum of Understanding (MoU) with which Country that will focus on socio-economic development and livelihood initiatives in the Rakhine State?
♦ **Myanmar**
- ✍ Which country has been launched a land exploration satellite into a preset orbit for remote sensing operations?
♦ **China**
- ✍ Which arabic nation has introduced VAT system recently along with United Arab Emirates (UAE)?
♦ **Saudi Arabia**
- ✍ Prime Minister Narendra Modi has been signed MoU between India and ----- on Cooperation in the field of Information Communication Technology and Electronics (ICT&E)?
♦ **Belgium**
- ✍ Prime Minister Narendra Modi has approved the Agreement between India and ----- on Land Border Crossing.
♦ **Myanmar**

FINANCIAL AWARENESS

- ✍ The NABARD has sanctioned ____ crore loan to Odisha.
♦ **Rs 372.51**
- ✍ Union Cabinet recently approved the establishment of new AIIMS in Bilaspur (Himachal Pradesh). The cost of this project is _____.
♦ **Rs.1351 crore**
- ✍ Andhra Pradesh Grameena Vikas Bank (APGVB) has Introduced Desktop ATM in Rural India. It is sponsored by which Bank?
♦ **SBI**
- ✍ Telangana Industrial Health Clinic Ltd (TIHCL) has got RBI approval to function as a non-banking finance company (NBFC). Headquarters of TIHCL is in _____.
♦ **Hyderabad**
- ✍ Which Bank has tied up with Samsung Pay through which card holders will be able to pay using smartphones at merchant establishments?
♦ **Kotak Mahindra Bank**
- ✍ According to global financial services major Morgan Stanley, India's GDP growth rate will rise to _____ in 2018.
♦ **7.5%**
- ✍ World Bank has estimated India's GDP Growth Rate to _____ in 2018.
♦ **7.3%**
- ✍ India has been signed an agreement on automatic sharing of tax-related information with which country?
♦ **Switzerland**
- ✍ Which state government top in GST tax collection in first five months since the rollout of the GST tax regime?
♦ **Maharashtra**
- ✍ Government of Tamil Nadu has been signed a loan agreement with which International organization for Tamil Nadu Irrigated Agriculture Modernization Project?
♦ **World Bank**
- ✍ Which Organization has been launched 'Udyami Mitra' portal to improve the accessibility of Credit?
♦ **SIDBI**
- ✍ With which international organization U.P. government

has been signed a loan agreement for “U.P. Pro-Poor Tourism Development Project” ?

♦ **World Bank**

✍ Which public sector bank has been published electoral bond? ♦ **SBI**

✍ Who has approved mandatory packaging of food grains in Jute Materials ? ♦ **CCEA**

✍ RBI has decided a new interest rate for their Government saving bonds is ----
♦ **7.75%**

✍ What is the dimension of new 10 Rs. banknote that has been issued by RBI ? ♦ **63 mm x 123 mm.**

✍ RBI has imposed Prompt Corrective Action on which public sector bank recently? ♦ **Allahabad Bank**

✍ Paytm Payments Bank has partnered with which private sector bank in India ? ♦ **IndusInd Bank**

SPORTS

✍ Who has won the WTA Auckland Classic title by defeating Caroline Wozniack? ♦ **Julia Goerge**

✍ Which Union Territory has become a new associate member of BCCI? ♦ **Puducherry**

✍ Who has won the Kolkata Open International Invitation Snooker Championship? ♦ **Aditya Mehta**

✍ Who has won ICC Women's ODI Team of the Year award ? ♦ **Indian Cricket Team**

✍ Who has bagged a gold medal National Shooting Championship Competition?
♦ **Manu Bhaker**

✍ Who has won silver medal in Galym Zharylgapov Boxing Tournament held in Kazakhstan?
♦ **Manish Kaushik**

✍ Who has won World Rapid Chess Championship held in Riyadh, Saudi Arabia? ♦ **Viswanathan Anand**

✍ Shiv Kapoor is associated with which sport ----
♦ **Golf**

✍ Name the first batsman who has scored three hundreds in T20 international matches ?
♦ **Colin Munro**

✍ Name the India's highest- ranked player in the latest International Table Tennis Federation (ITTF) ranking? ♦ **G Sathiyam**

✍ Name the player who has won an international bronze medal in Skiing? ♦ **Aanchal Thakur**

✍ Which Chinese Athletic player has been banned for eight years after failing a drugs test?

♦ **Wang Jiali**

SCIENCE AND TECHNOLOGY

✍ A new frog species Odorrana arunachalensis has been discovered in which state? ♦ **Arunachal Pradesh**

✍ With the launch of PSLV-C40, India has in total launched how many of its own satellites till date?
♦ **100**

✍ Scientists have observed less ozone depletion for the first time due to ban on which things?
♦ **Chlorine**

✍ In which state, a new species of blind fish has been discovered? ♦ **Mizoram**

✍ World Health Organization (WHO) can keep the ____ in the category of mental illness.
♦ **Gaming disorder**

✍ 'Proxima Centauri B' is a: ♦ **Exo planet**

MISCELLANEOUS

✍ How many digits are there in Adhaar Number?
♦ **12 Digits**

✍ How many digits would be there in virtual ID number? ♦ **16 Digits**

✍ Who has introduced the concept of limited KYC?
♦ **UIDAI**

✍ Where is the headquarter of Gail (India) Limited (GAIL) is located? ♦ **New Delhi**

✍ What is the Theme of Pravasi Bharatiya Divas (PBD) 2018?
♦ **Ancient Route, New Journey**

✍ The World Hindi Day (WHD) is observed every year on which date? ♦ **10 January**

✍ Good governance day was observed on which date in India? ♦ **26 december**

✍ Which place has been chosen as the host venue for the 2022 Commonwealth Games?
♦ **England**

✍ Losar Festival celebrations were organised at which place in India ? ♦ **Ladakh**

✍ World Minorities Rights Day is celebrated every year on which date? ♦ **18 December**

✍ International Human Solidarity Day is celebrated every year on which date? ♦ **20 December**

SPOTLIGHT | ALL THAT MATTERS

ABBREVIATIONS

GrAMs	: Gramin Agricultural Markets
RISE	: Revitalising Infrastructure and Systems in Education
PMRF	: Prime Minister's Research Fellows
UDAN	: Ude Desh ka Aam Nagrik
CBIC	: Central Board of Indirect Taxes and Customs
MKSP	: Mahila Kisan Sashaktikaran Pariyojana
FAIDF	: Fisheries and Aquaculture Infrastructure Development Fund
AHIDF	: Animal Husbandry Infrastructure Development Fund
TOT	: Toll, Operate and Transfer

IMPORTANT DAYS AND DATES

April 5	National Maritime Day
April 7	World Health Day
April 11	National Safe Motherhood Day
April 13	Jallianwala Bagh Massacre
April 17	World Hemophilia Day
April 18	World Heritage Day
April 22	Earth Day
April 23	World Book and Copyright Day
April 30	Anti-Child Labour Day

ECONOMIC GLOSSARY

Cobweb cycle

Cobweb cycle, in economics, fluctuations occurring in markets in which the quantity supplied by producers depends on prices in previous production periods. The cobweb cycle is characteristic of industries in which a large amount of time passes between the decision to produce something and its arrival on the market. It occurs most commonly in agriculture, because the decision of what to produce in the coming year is often based on the results of the previous year. For example, if corn prices are particularly high in a given year, more farmers will choose to plant corn the next year to take advantage of the high price. This increased supply, however, will lead to lower prices.

Double Taxation Avoidance Agreement

A DTAA is a tax treaty signed between two or more countries. Its key objective is that tax-payers in these countries can avoid being taxed twice for the same income. A DTAA applies in cases where a tax-payer resides in one country and earns income in another.

DTAAs can either be comprehensive to cover all sources of income or be limited to certain areas such as taxing of income from shipping, air transport, inheritance, etc.

BOOKS & AUTHORS

01 |

WHY I AM A HINDU



:Shashi Tharoor



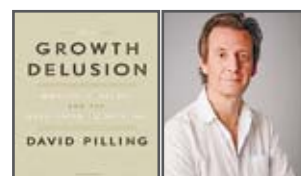
:Lizzie Collingham

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GROWTH DELUSION



:David Pilling



:Rita Chowdhury

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AN UNFINISHED REVOLUTION



:Kishalay Bhattacharjee



V Narayanan

Senior scientist Dr V Narayanan has assumed charge as Director of ISRO's Liquid Propulsion Systems Centre (LPSC). He succeeded S Somanath who was appointed as Director of Vikram Sarabhai Space Centre (VSSC).

Prior to this appointment, he was Associate Director of LPSC and was guiding liquid propulsion activities of ISRO and was instrumental in finalising the Liquid Propulsion Roadmap of ISRO for the next 20 years.

About Dr V Narayanan

Narayanan had joined ISRO in 1984 and since then has functioned in various capacities. He is rocket propulsion expert and outstanding scientist, guiding ISRO team that designed 200 ton thrust Lox-Kerosene Semi Cryogenic Rocket Engine.

He had played crucial role in successful development of Cryogenic Upper Stage (CUS) and made it operational for GSLV Mk II vehicle when India was denied complex Cryogenic Propulsion Technology. He also had played vital role in successful launch of GSLV Mk III vehicle in its maiden attempt in 2017 from Satish Dhawan Space Centre (SHAR), Sriharikota.

As Project Director for C25 Cryogenic Project, he had led team that successfully developed indigenous C25 Cryogenic Stage powered by 20 tonne thrust Cryogenic Engine using Liquid Oxygen and Liquid Hydrogen propellant combination.



Sudeep Lakhtakia

Sudeep Lakhtakia took charge as the Director General (DG) of National Security Guard (NSG). He succeeded S P Singh, who retired on January 31, 2018. Lakhtakia was serving as a Special DG in the Central Reserve Police Force (CRPF) headquarters in New Delhi.

About Sudeep Lakhtakia

Prior to being appointed as the Additional DG in the CRPF, the 1984 batch IPS officer was serving as the Additional Director-General of Law & Order in Telangana.

Among other positions, Lakhtakia occupied in his long career include Superintendent of Police in Warangal, Deputy Commissioner of Police (Traffic) and in Hyderabad-West Zone, Commissioner in Vijayawada and Deputy Inspector General of Security.

About NSG

- ✍ The NSG is an Indian Special Forces unit under the Ministry of Home Affairs (MHA).
- ✍ It was raised in 1984, following Operation Blue Star and the assassination of former Prime Minister Indira Gandhi for combating terrorist activities with a view to protect states against internal disturbances.
- ✍ The NSG is specially trained to conduct counter terrorist tasks including counter hijacking tasks on land, sea, and air, bomb disposal (search, detection and neutralization of IEDs), Post Blast Investigation (PBI) and Hostage Rescue missions.



S Somanath

Noted scientist S Somanath took charge as Director of Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram, Kerala. He succeeded K Sivan, who was recently appointed as Chairman of ISRO.

Prior to his elevation, he was Director of Liquid Propulsion Systems Centre (LPSC), the lead centre responsible for liquid engines and stages for all launch vehicles and satellite programs of ISRO,

S Somanath

S Somanath had joined ISRO in 1985 and was team leader for Integration of PSLV during its early development phase and during first flight of PSLV and successful second flight PSLV-D2. He also was Associate Director (Projects) of VSSC and also Project Director of GSLV Mk-III launch vehicle. He has received 'Merit Award' and 'Performance Excellence award' from ISRO and 'Team excellence award' for GSLV Mk-III development.

Vikram Sarabhai Space Centre (VSSC)

VSSC is major space research centre of ISRO, under the Department of Space (DOS). It is mandated to focus on rocket and space vehicles for India's satellite programme. It is located in Thiruvananthapuram, in the Indian state of Kerala. VSSC has emerged as one of the main research and development establishments within ISRO.

THE PEOPLE | APPOINTMENT



Jerome H Powell

Jerome H Powell was sworn in as the 16th Chairman of the Federal Reserve for a four-year term. His appointment as the Fed Chairman was approved by the US Senate in January 2018. Powell was nominated for the post in November 2017 by President Donald Trump. Powell succeeds Janet Yellen, the first woman to lead the US central bank in its 100-year history.

About Jerome H Powell

- ✎ Powell has been serving on the Federal Reserve's board since 2012. His term as a Fed board member will end on January 31, 2028.
- ✎ He also serves as Chairman of the Federal Open Market Committee, the System's principal monetary policymaking body.
- ✎ Before joining Fed in 2012, he served as a visiting scholar at the Bipartisan Policy Center, a Washington think tank.



Susanta Kumar Roy

Sushant Kumar Roy has been appointed as Director (Projects), NTPC, the state-owned company. He was Executive Director (Projects) at the country's largest electricity producer, NTPC. A Mechanical Engineering Graduate from REC, Durgapur, Roy joined NTPC in 1981 as Executive Trainee and has more than 36 years of experience in large size coal power stations. He was associated in managing largest station of the country at Vindhyachal.

NTPC Ltd., formerly known as National Thermal Power Corporation Limited, is an Indian Public Sector Undertaking, engaged in the business of generation of electricity and allied activities. The company has also ventured into oil and gas exploration and coal mining activities. In May 2010, NTPC was conferred Maharatna status by the Union Government of India.



Anandiben Patel

Gujarat's first woman Chief Minister Anandiben Patel has been appointed as Governor of Madhya Pradesh. She replaces Om Prakash Kohli, who has additional charge of the office of MP Governor along with the office of Gujarat Governor.

Anandiben Patel succeeded Narendra Modi as Gujarat CM after the 2014 parliamentary polls.

Anandiben Patel had stepped down as Chief Minister of Gujarat in August 2016 citing overage as the reason.

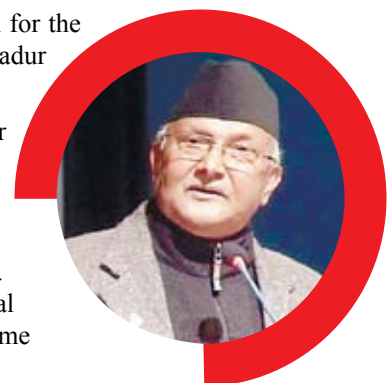
During the 2017 state assembly elections, she had refused to contest. She is the second Gujarat Minister from the BJP to have been made a Governor. Earlier, Vajubhai Vala, a former BJP MLA from Gujarat, was made Governor of Karnataka.

Khadag Prasad (KP) Sharma Oli

Khadag Prasad (KP) Sharma Oli has been appointed as the Prime Minister of Nepal for the second time. CPN-UML president KP Oli has been appointed to replace Sher Bahadur Deuba.

President Bidiya Devi Bhandari appointed 65-year-old Oli as the 41st Prime Minister of the country. KP Oli, who has been known for keeping soft attitude towards China, has been the Prime Minister of Nepal from October 11, 2015 to August 3, 2016.

For the Prime Minister post, Oli is supported by UCPN-Maoist, National Republican Party Nepal and Madhesi Rites Forum Democratic, besides 13 other smaller parties. CPN-UML and CPN-Maoist Center coalition won 174 out of 275 seats in the general elections held in December. Earlier, Sher Bahadur Deuba had resigned from the Prime Minister to the President after addressing the country.



AWARDS | THE PEOPLE

Panchayat Raj & Rural Development and IT Minister N. Lokesh received the Kalam Innovation in Governance Award-2018 (KIGA) presented by the Dr. A.P.J. Abdul Kalam Centre in New Delhi as part of the Dr. A.P.J. Abdul Kalam Memorial Summit and Awards on Innovation in Governance.

The Kalam Centre for Livable Planet Earth and Sustainable Development, recognising the development of rural areas and integration of technology in rural governance, selected Andhra Pradesh for the innovation award in the Panchayat Raj & Rural Development category.

About 'Kalam Innovations in Governance Award'

The 'Kalam Innovations in Governance Award' was established on 15th of October 2016, to mark the 85th birth anniversary of Dr. A.P.J. Abdul Kalam. It is India's first of its kind award on innovations in governance space. The award was a step in the direction of exploring how can be the cutting-edge technology, 21st century management and out-of-box thinking, transform the role and impact of governance in India and across the world.



'Kalam Innovations in Governance Award'

Bollywood megastar Shah Rukh Khan receives the Crystal Award at the World Economic Forum's Annual Meeting in Davos, along with Hollywood star Cate Blanchett and legendary musician Sir Elton John.

He receives this award for "his leadership in championing children's and women's rights in India."

The past awardees from India include Amitabh Bachchan, Mallika Sarabhai, A R Rahman, Shabana Azmi, Ravi Shankar and Amjad Ali Khan.

Sir Elton John has been selected for the 2018 award for his leadership in the fight against HIV/AIDS and Blanchett for her leadership in raising awareness about the refugee crisis.

The Annual Crystal Awards ceremony celebrates the achievements of outstanding artists who have shown exemplary commitment to improving the state of the world.

World Economic Forum (WEF)

The World Economic Forum (WEF) is a Swiss nonprofit foundation, based in Cologny, Geneva, Switzerland. The forum was founded in 1971 by Klaus Schwab. The forum is best known for its annual meeting at the end of January in Davos, a mountain resort in Graubünden, in the eastern Alps region of Switzerland. The meeting brings together some 2,500 top business leaders, international political leaders, economists, celebrities and journalists for up to four days to discuss the most pressing issues facing the world.



Crystal award at the World Economic Forum

Legendary playback singer Asha Bhosle (84) was chosen for fifth edition of Yash Chopra Memorial Award for her outstanding contribution to the Hindi film industry. She will be presented with award by Maharashtra Governor C Vidyasagar Rao.

Asha Bhosle : Born as Asha Mangeshkar on 8 September 1933 in Sangli, Maharashtra. She is best known as a playback singer in Hindi cinema. She has recorded over 11,000 songs in 20 different languages. Her work includes film music, pop, ghazals, bhajans, traditional Indian classical music, folk songs, qawwalis, and Rabindra Sangeets. She is sister of playback singer Lata Mangeshkar.

Yash Chopra Memorial Award

The award has been instituted by MP T Subbarami Reddy in the memory of renowned filmmaker Yash Chopra, who died in 2012, in association with Anu Ranjan and Shashi Ranjan. The award also carries a cash prize of Rs 10 lakh. The list of previous recipients of award include melody queen Lata Mangeshkar and actors Amitabh Bachchan, Rekha, and Shah Rukh Khan.



Yash Chopra Memorial Award

Uber has entered into a partnership with Eastern Railway to help travelers avail a ride at Howrah station.

Geospatial World Excellence Award-2018



i3MS web-based software

Odisha Government has won 'Geospatial World Excellence Award-2018' for successful IT application for tracking of mineral production, dispatch and value accrued on real-time basis through its i3MS web-based software.

The award was presented at the Geospatial World Forum Meeting held at Hyderabad, Telangana.

i3MS is GPS-linked web-based software designed by scientists of Odisha Space Applications Centre (ORSAC), Bhubaneswar. This system has enabled for first time in India to fix GPS devices on large number of moving objects in the mining sector.

Using it, daily production and dispatch are being recorded on real-time basis through this software. Moreover, State Steel and Mines Department uses it for watching live movement of 43,000 vehicles carrying minerals from production point to ports, railway sidings and end-user industrial units.

Geospatial World Excellence Awards

It is internationally-acclaimed private award that recognizes exemplary innovations and practices in global geospatial industry. It was initiated in 2007. It encourages all geospatial and allied projects. It is given in three categories viz. Geospatial Application Excellence Awards, Geospatial Technology Innovation Awards and Geospatial Policy Implementation Awards.

Sahitya Akademi Bhasha Samman award



Magahi writer Shesh Anand Madhukar was honoured with Sahitya Akademi Bhasha Samman award. He is second writer of Magahi language to be given this award.

Magahi language

Magahi language also known as Magadhi is language spoken in Bihar-Jharkhand region of eastern India. It has been derived from ancient language Magadhi Prakrit, spoken in ancient kingdom of Magadha. It is believed to be the language spoken by Gautama Buddha. It was official

language of the Mauryan court, in which edicts of Ashoka were composed. Magadhi has approximately 18 million speakers and has a very rich and old tradition of folk songs and stories. It has not been constitutionally recognised in India and was legally absorbed under Hindi in the 1961 Population Census.

Shesh Anand Madhukar

Madhukar has been working extensively for the development of the Magahi language. He had started his career as lecturer in Hindi. He entered in the field of literature in 1960 and since then he has immensely contributed in enrichment of language.

Grand Collar of the State of Palestine



Prime Minister Narendra Modi was conferred the 'Grand Collar of the State of Palestine' by President Mahmoud Abbas, recognising his key contribution to promote relations between India and Palestine. President Abbas conferred the Grand Collar of the State of Palestine on Modi after the conclusion of the bilateral meeting between the two leaders.

Narendra Modi is the first Indian Prime Minister to make an official visit to Palestine. The Grand Collar is Highest order given to foreign dignitaries — Kings, Heads of State/Government and persons of similar rank. It has in the past been awarded to King Salman of Saudi Arabia, King Hamad of Bahrain, President Xi Jinping of China, amongst others.

It is given in recognition of his wise leadership and his lofty national and international stature, and in appreciation of his efforts to promote the historic relations between the State of Palestine and the Republic of India; in acknowledgment of his support to our people's right to independence and freedom so that peace prevails in the region.



BJP MP Kairana Hukum Singh

Hukum Singh, BJP parliamentary from Uttar Pradesh's Kairana, passed away. He was 79. Hukum Singh had been a seven-time member of the Uttar Pradesh state assembly and was a minister in the state before entering the Lok Sabha in the 2014 elections.



Frida Topno

Former parliamentary from Odisha and Congress leader Frida Topno passed away. She was 92. Topno served as a Lok Sabha member for two terms from Sundergarh parliamentary constituency in 1991 and 1996. She was also elected to the Rajya Sabha from Odisha in 1998.



Asma Jahangir

Asma Jahangir, Pakistan's renowned human rights lawyer, social activist and an outspoken critic of the country's powerful military establishment, died. She was 66. Asma was the first woman to serve as the President of Supreme Court Bar Association of Pakistan. She was a critic of the Supreme Court over judicial activism and

she also criticized the Supreme Court for disqualifying Nawaz Sharif for the post of Prime Minister last year.



Muzaffar Hussain

Noted writer, thinker and journalist Muzaffar Hussain died. He was 78. In his illustrious career, he bagged several state and national level awards in literature, besides Padmashree in 2002. He was conferred with the Lokamanya Tilak Jeevan Gaurav award for journalism by the government of Maharashtra in 2014.



Khwaja Haleem

Former Uttar Pradesh minister and senior Samajwadi Party leader Khwaja Haleem passed away. He was 75. Haleem, who belongs to a family of freedom fighters, completed his masters from Aligarh Muslim University in 1969. He started his political career with the Youth Congress in the early 1970s.

He later joined the Lok Dal and was elected to the Vidhan Sabha from Aligarh Assembly constituency in 1980. He remained a Mulayam Singh loyalist ever since and was elected twice for the Vidhan Parishad.

In 1990, Haleem was appointed the chairman of Uttar Pradesh Minority Commission and was the member of the Samajwadi Party Central Committee for nearly two decades. In 2014, he was appointed advisor in tourism department by then chief minister Akhilesh Singh Yadav.



Gali Muddu Krishnama Naidu

Senior Telugu Desam Party (TDP) leader Gali Muddu Krishnama Naidu died. He was 71. He had held the cabinet post in the Ministry for Education, Forest and Higher Education and has a record of being elected for six terms to the State Assembly. After some differences with the Telugu

Desam party, he moved out and contested with ticket from the Congress party and won the election in 2004. However, he later resigned from Congress and joined back TDP in 2008 and was elected to Andhra Pradesh Assembly in 2009.



Bolla Bulli Ramaiah

Former union minister and Senior TDP leader Bolla Bulli Ramaiah died. He was 92. Bulli Ramaiah joined TDP at the time of its inception. He became an MP in 1984.

He was elected to the Lok Sabha from Iluru constituency in 1991, 1996 and 1999 and was the Minister of State for Commerce of the United Front Government in 1996-98.

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Burning Topics of the Month

President Ram Nath Kovind launched the Pulse Polio programme 2018

The Ministry of Commerce & Industry has launched Government e-Marketplace (GeM 3.0).

The Fifth edition of South Asia Region Public Procurement Conference was held in New Delhi.

& Many More...

22 January '18

Homeopathy Research Institute in Jaipur



The Minister of State (IC), for AYUSH, Shripad Yesso Naik laid the foundation stone for Central Research Institute (CRI) in Jaipur. This will be the third CRI under the aegis of Central Council for Research in Homoeopathy (CCRH), an autonomous body of Ministry of AYUSH for undertaking scientific research in Homoeopathy, with 23 institutes across the country. Homoeopathy research institutes at Shimla in Himachal Pradesh, Lucknow in UP and Siligudi in West Bengal are also lined up. The institute is also contributing to the Swasthya Rakshan Program at five adopted villages i.e. Chharsa, Kumbhawas, Sakatpura, Khoraladkhani, Hanutpura. Under National Health Mission, 19 villages under Amber block are being catered to for the program "Healthy Teething in Children through Homoeopathy".

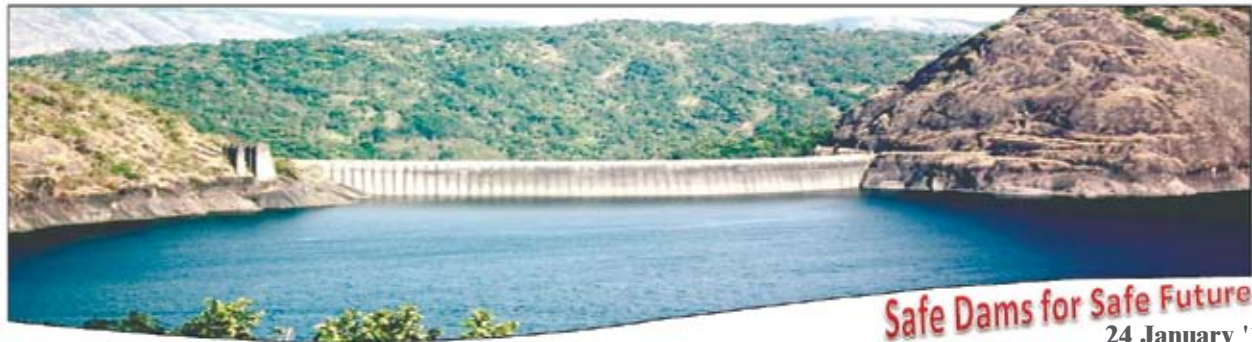
23 January '18

Cyber Surakshit Bharat initiative' for strengthening cybersecurity

Recognizing the need to strengthen the cybersecurity ecosystem in India, and in alignment with the Prime Minister's vision for a 'Digital India', the Ministry of Electronics and Information Technology (MeitY), announced the Cyber Surakshit Bharat initiative in association with National e-Governance Division (NeGD) and industry partners. Conceptualized with the mission to spread awareness about cybercrime and building capacity for safety measures for Chief Information Security Officers (CISOs) and frontline IT staff across all government departments, Cyber Surakshit Bharat will be operated on the three principles of Awareness, Education and Enablement. It will include an awareness



program on the importance of cybersecurity; a series of workshops on best practices and enablement of the officials with cybersecurity health tool kits to manage and mitigate cyber threats. Cyber Surakshit Bharat is the first public-private partnership of its kind and will leverage the expertise of the IT industry in cybersecurity. The founding partners of the consortium are leading IT companies Microsoft, Intel, WIPRO, Redhat and Dimension Data. Additionally, knowledge partners include Cert-In, NIC, NASSCOM and the FIDO Alliance and premier consultancy firms Deloitte and EY. Today, India is home to over 118 crore Aadhaar accounts, providing people with a unique identity. We have opened 30 crore bank accounts for the poor and underprivileged section of the society and linked those with Aadhaar. So far the Government has transferred subsidies worth 2.40 lakh crore to the Jan Dhan accounts linked with Aadhaar, thereby saving over 60,000 crore, which would earlier go to the middlemen. As we are moving towards that ecosystem, we also must ensure that our systems are protected and our data is secured. Keeping this concern in mind, the government has launched the Cyber Surakshit Bharat, with a primary objective to keep our data safe and protected. Cyber Surakshit Bharat aims to conduct a series of training programs in the next six months across Delhi, Mumbai, Bangalore, Hyderabad and Chennai.



International Dam Safety Conference - 2018

India hosted the International Dam Safety Conference - 2018 at Thiruvananthapuram. Dam safety conferences are organized as an annual event under the Dam Safety Rehabilitation and Improvement Project (DRIP) project being run by the Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD & GR) in the seven states of Jharkhand, Karnataka, Kerala, Madhya Pradesh, Odisha, Tamil Nadu, and Uttarakhand. Launched in the year 2012 with a financial outlay of Rs. 2100 Crores, this World Bank aided project aims at the rehabilitation of old dams in the country that may be experiencing distress and are in need of attention for ensuring their structural safety and operational efficiency. The project also aims to strengthen the institutional capacity and project management in this area. As part of this exercise, DRIP has been engaged in bringing greater awareness on dam safety issues and finding novel solutions to address them by pooling the best technologies, knowledge and experience available around the world. In this direction, Dam Safety Conferences are being organized as annual events in the different DRIP states.

Seven dam safety guidelines and manuals developed under DRIP was released for implementation during the conference. A software programme - Dam Health and Rehabilitation Monitoring Application (DHARMA)- was launched during the conference. DHARMA is a web tool to digitize all dam related data effectively. It will help to document authentic asset and health information pertaining to the large dams in the country, enabling appropriate actions to ensure need based rehabilitation. It is a new stride in asset management aspect by India. The project DRIP consists of three main components; Component I: Rehabilitation of selected dams and their appurtenances; Component II: Institutional Strengthening; and Component III: Project Management.

Pulse Polio Programme 2018 27 January '18

President Ram Nath Kovind launched the Pulse Polio programme 2018 by administering polio drops to children less than five years old at the Rahstrapati Bhawan, New Delhi. The programme was launched on the eve of the National Immunization Day, which is observed every year on 28 January 2018. Under the Pulse Polio Programme 2018, more than 17 crore children of less than five years across the country will be given polio drops to sustain polio eradication from the country.

Union Government's efforts to sustain polio-free status of the country

In order to mitigate the risk of poliovirus importation, the immunity against polio infection is maintained through National and Sub-National Polio rounds along with sustained high quality polio surveillance.

In order to provide additional protection to children, Union Government has also introduced the injectable Inactivated Polio Vaccine (IPV) into its routine immunization program.

About Pulse Polio Immunization (PPI) Program

- ✎ The Pulse Polio Immunization (PPI) Program was initiated in India in 1995 with the aim of eradicating polio completely from the country.
- ✎ The program was launched under the World Health Organization's (WHO) Global Polio Eradication Initiative.
- ✎ Under this program, every child below five years in age is given two doses of Oral Polio Vaccine (OPV), in the month of January and December every year and it needs to be continued till Polio is eradicated completely.
- ✎ It aims to reach unreached children through improved social mobilization, plan mop-up operations in areas where poliovirus has almost disappeared and maintain high level of morale among the public.

27 January '18

Stree Swabhiman Initiative



Union Information Technology and Electronics Ministry announced to launch the Stree Swabhiman Initiative to ensure and maintain perfect health for Women and maintain Health Hygiene.

The initiative was launched in partnership with Common Service Centres (CSCs).

Highlights of the Stree Swabhiman Initiative

- ✎ The initiative will be implemented by the central government in coordination of the CSC (Common Service Centers). The entire project will also be implemented within the country at the ground root level.
- ✎ Under this initiative, Common Service Centres (CSC) will provide access to affordable, reliable and modern (eco-friendly) sanitary napkins (menstrual pads) to adolescent girls and women in rural areas.
- ✎ Under this initiative, semi-automatic and manual sanitary napkin manufacturing units will be set up at CSC for producing affordable and eco-friendly sanitary napkins.
- ✎ These micro manufacturing units will be operated by women entrepreneurs and each production unit will generate employment for 8-10 women.
- ✎ The new sanitary pads that will be manufactured by the CSC will be more eco friendly and cheaper ones.
- ✎ It will help promote the idea of protecting the rights of all women and girls within the country.

29 January '18

High performance computer system (HPC) or supercomputer Mihir

Ministry of Earth Science (MoES) has inaugurated high performance computer system (HPC) or supercomputer Mihir (meaning sun) at National Centre for Medium Range Weather Forecasting (NCMRWF), Noida.



The HCP will provide facility for improving weather/climate forecasts. It is country's largest HPC facility in terms of peak capacity and performance. It also propelled India's ranking to Top 30 in the list of HPC facilities in world.

Key Facts

With this, MoES has acquired HPC facility total of 6.8 Peta Flops (PF) which has been installed at two of its constituent units: 4.0 PF HPC facility named 'Pratyush' at Indian Institute of Tropical Meteorology (IITM), Pune and 2.8 Peta Flops facility at NCMRWF, Noida. It also improved India rank to 4th position after Japan, UK and US in terms of dedicated HPC resources for weather/climate forecasts.

Mihir HPC facility will improve following services

- ✎ Weather forecasts at block level over India which can predict extreme weather events.
- ✎ High resolution seasonal and extended range forecasts of active and break spells of Monsoon.
- ✎ Very high resolution coupled models for prediction of cyclones with more accuracy and lead time.
- ✎ Ocean state forecasts including marine water quality forecasts at very high resolution.
- ✎ Tsunami forecasts with greater lead time.
- ✎ Air quality forecasts for various cities.
- ✎ Climate projections at very high resolution.

Significance of new HPC facility

- ✎ Help in meeting operational requirements of MoES and also support research and development activities on various problems related to Earth Science.
- ✎ Help MoES in developing several services for societal benefits catering by building state-of-the-art systems for multi-hazard risk reduction from floods/droughts, cyclones, heat/cold waves, earthquakes and tsunamis.

L&T Shipyard has launched its 2nd indigenously built Coast Guard offshore patrol vessel (OPV) 'Vijaya'

NEWS BITES | NATIONAL

The Ministry of Commerce & Industry has launched third version of the Government e-Marketplace (GeM 3.0). The earlier version GeM 2.0 was launched as pilot project in August 2016.

GeM 3.0 will offer standardised and enriched catalogue management, powerful search engine, real time price comparison, template-based Bid and RA creation, demand aggregation, e-EMD, e-PBG, user rating, advanced MIS and analytics and more.

Government e-Marketplace (GeM)

GeM is an Online Market platform to facilitate procurement of goods and services by various Ministries and agencies of the Government. It has been envisaged as National Procurement Portal of India.

It aims to enhance transparency, efficiency and speed in public procurement of goods and services and eliminate corruption. It functions under Directorate General of Supplies and Disposals (DGS&D), Ministry of Commerce and Industries. It is completely paperless, cashless and system driven e-market place that enables procurement of common use goods and services with minimal human interface.

GeM 3.0

It has powerful search engine and price comparison using third party sites – multisource and real time. It has performance based User Rating and online vendor assessment (optional). It has market based-bundling and bunching of products and services. It also has multi-Cart Functionality and offers more Services with bid and RA Facility.

Benefits of GeM 3.0

- Completely transparent transactions across all ranges.
- Market Based generic requirements across all government agencies.
- Open and dynamic market place with rating based on performance of user on website.
- Generic standards established through universal service levels and cost comparison enabled.
- Standardisation of specifications of both products and services enabling empirical price comparability.



MoU between Cochin Shipyard Limited signs with USC

02 February '18

The Cochin Shipyard Limited (CSL) and joint stock company United Shipbuilding Corporation (USC), Russia signed a Memorandum of Understanding (MoU) to collaborate and engage in Design, Development and Execution of modern vessels for Inland and Coastal Waterways.

Highlights of the MoU

- ✈ CSL and USC will collaborate for development of High-Speed Vessels, River-Sea Cargo Vessels, Passenger Vessels, Dredgers, and other watercrafts for inland waterways and coastal shipping.
- ✈ The MoU will give a push to the Government's Make-in-India programme as it plans to develop eco-friendly and economic transportation along India's inland waterways and coastal shipping routes under SAGARMALA Project.

✈ Once the infrastructure for water based transport is in place, there will be a demand for different kinds of specialized vessels and the MoU is an effort to get ready to cater this demand.

United Shipbuilding Corporation (USC), a Joint Stock company, is the largest shipbuilding holding in Russia. It incorporates about 40 enterprises including shipyards which have been key contributors to the growth of inland waterways in Russia.

On the other hand, CSL has recently incorporated a JV Company called Hooghly Cochin Shipyard Limited (HCSL) at Kolkata, West Bengal with plans of setting up an exclusive facility for construction and repair of vessels for inland and coastal waterways.

03 February '18

Project agreement for Jal Marg Vikas Project on river Ganga

Indian Waterways Authority of India (IWAI) signed a project agreement with the World Bank for Jal Marg Vikas Project on river Ganga.

World Bank entered into a USD 375 million loan agreement with the Department of Economic Affairs, Union Ministry of Finance for Jal Marg Vikas Project (JMVP).

Funding of the Jal Marg Vikas Project

The signing of the project agreement follows the approval of the Cabinet Committee on Economic Affairs for the implementation of the USD 800 million JMVP for capacity augmentation of navigation on National Waterway-1 (River Ganga) from Varanasi to Haldia.

Out of the remaining amount, USD 380 million is to be sourced through the Union Government counterpart funds from budgetary allocation and proceeds from the bond issue. Another USD 45 million will come from private sector participation under the PPP mode.

Jal Marg Vikas Project, which is expected to be completed by March 2023, is being implemented with the financial and technical support of the World Bank.

Jal Marg Vikas Project (JMVP)

- ✎ The Jal Marg Vikas Project aims to enable commercial navigation of vessels with the capacity of 1500 - 2000 tons on National Waterway-1.
- ✎ The development and operations of the National Waterway-1 project will lead to direct employment generation to the tune of 46000 and indirect employment of 84000 in the states of Uttar Pradesh, Bihar, Jharkhand, West Bengal.
- ✎ The project includes development of fairway, Multi-Modal Terminals at Varanasi, Haldia and Sahibganj, strong river navigation system, modern River Information System (RIS), Digital Global Positioning System (DGPS), night navigation facilities, construction of a navigational lock at Farakka.
- ✎ This waterway will function as a link to Bangladesh, Myanmar, Thailand, Nepal and other east and south-east Asian countries through the Kolkata Port and Indo-Bangladesh Protocol Route.

KUSUM SCHEME

05 February '18



Under the Kusum Scheme, all the pumps used for irrigation in the country will be made solar based. Under Kisan Urja Suraksha evam Utthaan Mahaabhiyan (KUSUM) scheme, by the year 2022, three crore pumps in the country will be run by solar power instead of electricity or diesel. Total cost of Kusum Scheme will be Rs 1.40 lakh crores.

In this scheme, the central government will contribute Rs 48 thousand crore, while the same amount will be given by the state governments. Farmers will have to raise only 10 percent of the total cost, while about Rs 45,000 crore will be made from bank loan.

About the scheme

- ✎ Under the Kusum scheme, 30 million irrigation pumps of the country will be run with solar energy.
- ✎ Farmers will have to pay only 10 percent of the cost.
- ✎ Government will mobilize about 45 thousand crores in the form of bank loan for this scheme.
- ✎ The plan will generate 28 thousand MW of electricity.
- ✎ This scheme will help farmers to double benefits. First, it will get free electricity for irrigation. Second, the farmer will make extra electricity and send it to the grid, then the price will also be given to the farmers.
- ✎ In the first phase of the scheme, 17.5 lakh irrigation pumps running from diesel will be run with solar energy.

Benefits of KUSUM scheme

- ✎ If running from solar power, irrigation from pumps will be possible for long and the yield of crops will improve.
- ✎ This will reduce the consumption of diesel in the country.
- ✎ Negative effects of diesel on the environment will also decrease.
- ✎ This will create additional power generation in the country.
- ✎ Power saving of farmers will be possible.

06 February '18

Ministry of Railways has signed MoU with the Ministry of Ayush



Ministry of Railways has signed MoU with the Ministry of Ayush for promoting Ayush services in Railway Hospitals in New Delhi.

B.R. Singh Hospital, Eastern Railway, Perambur Railway Hospital, South Railway, Central Hospital of Northern Railway, J. R. hospital of Western Railway will be benefited through this decision.

Key facts related to AYUSH services:

- ✎ AYUSH services will be promoted in New Delhi, Mumbai, Kolkata, Chennai and Guwahati Regional Hospitals.
- ✎ Traditional knowledge of AYUSH system can be helpful for those large numbers of railway workers who do stressful duty outside the office.
- ✎ Cooperation between Ministry of Railways and Ministry of AYUS will work to spread the benefits of ancient tradition of medicine.
- ✎ Medicines prepared by AYUSH system provide a safe, effective and overall treatment for many diseases.
- ✎ Railway Ministry will provide basic infrastructure and transportation facilities in accordance with the guidelines of the MoU, which includes providing land and buildings, equipment, furniture, medicines of AYUSH system.
- ✎ The AYUSH Ministry will provide necessary technical information for the use of AYUSH system in five identified railway hospitals on its behalf.
- ✎ AYUSH Ministry will provide technical information related to drug science, storage of medicines, planning for hospitals.

At present, Indian Railway is operating 126 homeopathic and 40 ayurvedic medical centers through the karmi Kalyan Fund of Directorate of Installation.

Fifth South Asia Region Public Procurement Conference

06 February '18

The Fifth edition of South Asia Region Public Procurement Conference was held in New Delhi. It was hosted by Public Procurement Division (PPD) of Ministry of Finance and All India Management Association (AIMA). It was held under auspices of South Asia Region Public Procurement Network (SARPPN), which is sponsored and facilitated by the World Bank, Asian Development Bank and Islamic Development Bank.

Key Facts

The theme this edition of conference was “Public Procurement and Service Delivery”. It aims to strive to improve public procurement of member countries to ensure timely and quality delivery of public services. Its objective was to enable heads of Public Procurement and other key stakeholders in 8 South Asian countries (Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, Sri Lanka and Afghanistan) to meet and learn from one another and from experts in field of public procurement. It will help South Asian Governments to consider enhancements and innovations in their public procurement systems, enable efficient utilization of public resources, ensure quality and timeliness in delivery of services.

Background

The First Conference was held in Kathmandu in 2010, second in Islamabad (2014), third in Dhaka (2015) and fourth in Sri Lanka (2017). All eight SAR countries spend approximately \$550 billion equivalent on public procurement of goods, works and services, which eventually convert to public services.

07 February '18

Development of Solar Cities scheme

Ministry of New and Renewable Energy (MNRE) under its “Development of Solar Cities” scheme has sanctioned development of 60 Solar Cities including 13 Pilot and 5 Model Cities up to 12th Five-year Plan period (2012–2017). So far, master plans of 49 Solar Cities have been prepared. Moreover, Stake-holders Committees have been constituted in 21 Cities and Solar City Cells have been created in 37 Solar Cities.



About the scheme

The Scheme aims at reducing minimum 10% in projected demand of conventional energy at end of five years, through combination of enhancing supply from renewable energy sources in city and energy efficiency measures. Under it, local Governments are motivated for adopting renewable energy technologies and energy efficiency measures. Solar City developed under this scheme will have all types of renewable energy based projects like solar, wind, biomass, small hydro, waste to energy etc. It may be installed along with possible energy efficiency measures depending on the need and resource availability in the city.

08 February '18

President inaugurates Mahamastakabhisheka of Lord Bahubali

President Ram Nath Kovind inaugurated the Mahamastakabhisheka, the head anointing ceremony of the monolithic statue of Lord Gommateshwara Bahubali, a ritual observed once in 12 years.



The ceremony is an integral part of the ancient and composite Jain tradition at the Jain pilgrimage centre. Bahubali was one of the 24 Teerthankars of Jain sect.

Hailing the rich Jain tradition around Shravanabelagola and the towering 57 feet tall statue, the president said Shravanabelagola has been a centre of religion, spirituality and Indian culture.

The ceremony will be held from February 17 to February 26. Organisers estimate the arrival of at least 40 lakh pilgrims at Shravanabelagola in the next 20 days.

Located between the two hillocks of Vindyagiri and Chandragiri, Shravanabelagola has been a Jain pilgrimage centre for the past 2,500 years.

The 2018 ceremony is the 88th in the series that began in 981 A.

Cabinet approves proposal to implement PM's scheme for research fellows

08 February '18



The Union cabinet approved a proposal to implement the Prime Minister's Research Fellows (PMRF) scheme, under which the top 3,000 B.Tech graduates of the country will get grants to pursue a PhD in the Indian Institutes of Technology (IITs) and Indian Institute of Science (IISc). The cabinet approved the scheme at a cost of Rs1,650 crore for a period of seven years, beginning 2018-19. The scheme was announced by Union finance minister Arun Jaitley during his budget speech in Parliament on 1 February.

"Under this scheme, the best students who have completed or are in the final year of B.Tech or integrated M.Tech or M.Sc in science and technology streams in the IISc/IITs/NITs/IISERs/IITs will be offered direct admission in the PhD programme in the IITs/IISc," an official statement said.

13 February '18

Gadkari releases India's first 'Highway Capacity Manual'

Union Minister Nitin Gadkari released country's first ever Highway Capacity Manual (HCM) which will guide road engineers and policy makers about road expansion.

The manual known as 'Indo-HCM' has been developed by CSIR-CRRI on the basis of an extensive, country-wide study of the traffic characteristics on different categories of roads like single lane, two-lane, multi-lane urban roads, inter-urban highways and expressways and the associated intersections on these roads, the Ministry of Road Transport and Highways said in a statement.

The road transport and shipping minister "released India's first ever Highway Capacity Manual. The manual will guide Road Engineers and Policy Makers about Road Expansion".

The study involved seven academic institutions including IIT-Roorkee, Mumbai and Guwahati, School of Planning and Architecture, New Delhi, Indian Institute of Engineering and Science and Technology, Shibpur, Sardar Vallabhai Patel National Institute of Technology, Surat and Anna University, Chennai.

The manual lays down guidelines for when and how to expand or manage different types of roads and their intersections and the level of services to be put in place. It has been developed based on the unique nature and diversity of traffic on Indian roads.



14 February '18

India-Russia Agriculture Business Summit held in New Delhi

As a part of the country-wide year-long celebration of India-Russia Diplomatic Relations, since April 2017, the Ministry of Agriculture & Farmers Welfare organised two major events, an India-Russia Agriculture Business Summit held in New Delhi and celebration of 70 years of Agricultural Relationship to be held in Suratgarh, Rajasthan on 14th February 2018.

Gajender Singh Shekhawat, Union Minister of State for Agriculture and Sergey Beletskiy, Deputy Minister, Ministry of Agriculture, Russia addressed the India-Russia Agriculture Business Summit 2018, held at PUSA, New Delhi. Several business houses and leaders of business associations of both countries, working in agriculture sector attended the event. This will strengthen exchange of expertise to further business ties between the two countries.

Apart from presentation by both countries that highlighted the agricultural trade opportunities, there was intense discussion in 4 theme sessions on potential areas of collaboration and trade in the fields of agriculture machinery; sanitary and phytosanitary measures (both plants and animals); agriculture education and biotechnology; fishery and sea products (including feeding, care and processing); and confectioner's/baker's, dry fruits and coconut products. The discussions were facilitated by officers of Ministry of Agriculture & Farmers Welfare and Ministry of Food Processing Industries.

The Russian and Indian delegations will visit Central State Farm (CSF) in Suratgarh, Rajasthan on 14.2.2018, which was set up in 1956 with assistance from erstwhile USSR. Union Minister of State for Agriculture & Farmers Welfare and Deputy Minister of Russia will inaugurate Russian Machinery Museum, address a gathering of farmers in which the veterans of the farm will be facilitated, and also visit Cattle Breeding Centre. Russian scientists helped in laying the foundation of agriculture in the deserts of Thar, which brought about a change in the agriculture farming in nearby areas including fringe area of Punjab.



R.K. Singh inaugurates 'Indian Power Stations 2018' - International Conference on Operations and Maintenance

18 February '18

Union Minister of State (IC) for Power and New and Renewable Energy, R.K. Singh inaugurated the 'Indian Power Stations 2018' - three-day International Conference on Operations and Maintenance. The Minister exhorted the NTPC to become India's power sector multinational by setting up power plants in other Nations and become world's largest power producer. Singh also added that there was huge opportunity to export cheap power to neighbouring countries which will be beneficial for the entire region.

The Minister said that neighbouring countries like Sri Lanka, Myanmar, Nepal and Bangladesh are viable markets for export of power, where per unit cost of electricity is very high. He added that Ministry of Power would explore the idea of sending teams to these countries to assess the demand for export of power.

Talking about achieving Government's aim of '24x7 Power for All' Singh said, "If you look at the entire power sector, the demand has been suppressed because not everyone is connected. We have just started taking-off and going to enter double digit growth. What we see as excess capacity today may not turn out to be enough if we unlock that demand. The unlocking of demand will come but with some constraints. We don't have a shortage of coal but we need to put in place mechanisms to get coal from underground to over ground and to the power stations and we need to do that as soon as possible".

Further, the Minister added that when all power plants in the country would run at 70-80 per cent of PLF, there would be no stressed assets. The problem of stressed assets is there because first, the power plants are not able to get adequate coal and secondly, demand needs to be unlocked.



Burning Topics of the Month

**Loan Agreement
to improve access
to Water Supply in
Uttarakhand**

**Kolkata first metro
city in India to get
floating market**

**First State Health Index
is released NITI Aayog**

& Many More...

21 January '18

**Nanaji Deshmukh Krishi
Sanjivani Yojna**



Main objectives of scheme

- *Promote very idea of sustainable development in agricultural sector.*
- *Eliminate the problems of ground water salinity problems.*
- *Improve conditions of the agricultural yields to overcome the climatic changes.*
- *Promoting the quality of the soil such that quality of food grains produced can be improved.*
- *Cultivate new variety of grains that will more sustainable and adaptable to climatic changes.*

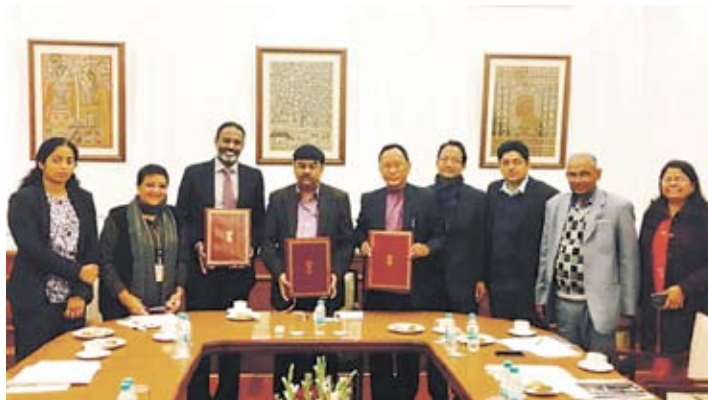
Maharashtra Govt. has approved Nanaji Deshmukh Krishi Sanjivani Yojna, a Rs.4,000-crore project aimed at promoting climate-resilient agriculture. It will be roll out in 2018-19 and continue till 2023-24. The Scheme has been named after social activist Nanaji Deshmukh who has worked in fields of education, health, and rural self-reliance, and has been honoured with Padma Vibhushan. The scheme will be implemented in 5,142 villages across 15 districts. Its objectives are to improve soil quality, develop foodgrain varieties which can sustain climate variations and effect necessary changes in the crop pattern as per the availability of water in a particular region. The scheme will cover small- and medium- scale farmers, who are more vulnerable to the impact of climate change. The total cost of project is Rs 4,000 crore, 70% of which will be borne by World Bank while state will contribute 30% over six years. The entire project will focus on promoting climate resilient method of agriculture and cultivation that will be monitored within various districts and villages in the state. It also strives at doubling income of state farmers by next few years till 2022 for farmers belonging to medium and small grades to help overcome loses. Under it, state government will also try and take new measures to help change the pattern of cultivation of the crop depending on the availability of the water. This will help in making the state drought free.

22 January '18

Loan Agreement to improve access to Water Supply in Uttarakhand

The Government of India, the Government of Uttarakhand and the World Bank Board signed a \$120 million Loan Agreement which will help increase access to improved water supply services in peri-urban areas in the State of Uttarakhand.

The Uttarakhand Water Supply Program for Peri-Urban Areas will help the State increase water supply coverage as well as ensure sustainable water supply service delivery in peri-urban areas. It will develop and implement a service-oriented and efficient water supply policy for peri-urban areas, strengthen the current monitoring and evaluation systems, and provide dedicated incentives for preparation and adoption of water supply 'master-plans' in peri-urban areas.



Highlights of the program:

- Over 700,000 people residing in peri-urban areas of the state are expected to benefit from the program.
- Through this project, the peri-urban population in the State, especially the women will have easy access to regular water supply services.
- The Program will focus on increasing coverage, quality and reliability of water supply services in all peri-urban areas of the State.
- Services would be provided through piped network and metered service connections with a focus on improving the operation and management (O&M) of it.
- Some of the efforts at improving services under the Program will include ensuring a minimum 16-hour water supply which meets the Government of India water quality standards, supplied at a minimum pressure of 12m, for no less than 300 days in a year.
- 100 percent customer metering and volumetric tariffs
- The \$120 million loan from the International Bank for Reconstruction and Development (IBRD), has a 5-year grace period, and a maturity of 17 years.

The Chief Minister-gi Hakshelgi Tengbang (CMHT)

23 January '18

Manipur Chief Minister N Biren Singh launched the Chief Minister-gi Hakshelgi Tengbang (CMHT), a pioneering health assurance scheme for the poor and disabled people. The chief minister launched the CMHT along with 10 advanced life support ambulances as a gift of Statehood Day to the people of Manipur at a function at Khuman Lampak Indoor Stadium. The CMHT will provide cashless treatment to the poor at government hospitals, health centres and other empanelled selected private hospitals. The scheme will provide cover up to Rs 2 lakh per eligible family identified from the Socio Economic Caste Census (SECC) in the treatment of seven critical identified critical ailments - cardiovascular diseases, kidney ailments, neurological conditions, liver ailments, cancer, neo-natal diseases and burns per year. The beneficiaries may get themselves enrolled for the scheme with the help of ASHA workers at the kiosks opened in nearby PHCs, CHCs and District Hospitals. The most special aspect of the scheme is its innovative features. Firstly, CMHT will have convergence with Government of India programme like PMs Jana Aushadhi Programme and Free Diagnostic Programme. Secondly, the scheme will be a truly IT platform driven scheme.



MoU for municipal solid waste incineration facilities in Telangana

Paving way for a cleaner Telangana, the State government of Telangana signed a memorandum of understanding (MoU) with Clean Authority of Tokyo for cooperation in the field of municipal solid waste incineration facilities. The State government had been mulling various proposals to tackle solid waste, waste water and polluted air in urban areas especially emanating from industries. Based on government's ideas, a Japanese team from Clean Authority of Tokyo, which handles Tokyo's waste management, conducted a feasibility study to set up a Clean Authority of Telangana a few months ago. The Clean Authority will deal with vital aspects of waste management, including collection, transfer, management and administration of landfill disposal sites, besides tackling air and water pollution.

Officials are making arrangements to introduce a Bill for constituting the Clean Authority of Telangana on the lines of Clean Authority of Tokyo, in the ensuing budget session of the legislature. In view of fast growing urban centres across the State, the officials said that the government decided to establish the authority at the State-level unlike Tokyo which was restricted to the Japan's capital city. The Clean Authority of Tokyo will share technical know-how, human resource training and other issues in municipal solid waste incineration facilities. The government will examine proposals for the waste to energy projects as well. A letter of interest was also signed between the Telangana government and Ise Foods Inc in the presence of the Telangana Minister and the Indian Ambassador to Tokyo, facilitating Ise Foods Inc to establish its pilot project for egg production using advanced technologies, establish a solar park to support its egg production facility and also develop storage devices in the State. Ise Foods, Japan's largest egg producer, is eyeing enormous Indian market to launch major egg production operations in the country.



Kolkata first metro city in India to get floating market

26 January '18

Kolkata, capital of West Bengal became first metro city in India to get floating market. It was inaugurated by West Bengal Chief Minister Mamata Banerjee.

The floating market is located on lake at Patuli in South Kolkata which is 400 metres long and 60 metres wide. The lake has been transformed into the floating market similar to the one in Thailand.



Key Facts

The aim of floating market is to rehabilitate over 200 shopkeepers from nearby market that was demolished for the widening of Eastern Metropolitan Bypass (EMB) — an important road that connects the northern parts of Kolkata to the eastern and southern tips.

The market will host at least 114 boats, each one accommodating two shops. These shops will sell regular or daily-use items that include vegetables, fruits, flowers, fish and meat and poultry. Shoppers can approach these boats through wooden walkways.

Special provisions have been made to ensure that water in lake does not stink and the aquatic life survives. Nets will be routinely used to fish out vegetable peel, fish scales and other waste from the water. The Kolkata Metropolitan Development Authority (KMDA) is executing agency of floating market.



27 January '18

'Shakti' app for women's safety

The Chief Minister of Himachal Pradesh, Jai Ram Thakur launched the 'Shakti' app for women's safety in the state. The app, which comes with a panic button, was developed by the National Informatics Centre (NIC) of the Himachal Pradesh government. It would be available in both Hindi and English languages and would not require internet connectivity.



Key Highlights

- ✎ Shaking the device would trigger the app to send its location through GPS.
- ✎ Once triggered, the app would automatically send a message to the nearest police control room.
- ✎ It would also start recording audio and video after 20 seconds. Besides this, the Chief Minister also launched the 'GUDDIYA' helpline number 1515 and the 'Hoshiyar Singh' helpline number 1090.

Key Objective

The main objective behind the launch of the app and the helpline is to fight crimes against women in the state. The Hoshiyar Singh helpline would be monitored by the CM's office on a 24x7 basis.

Mahatma Gandhi Sarbat Vikas Yojna (MGSVY)

28 January '18

Punjab Government has launched Mahatma Gandhi Sarbat Vikas Yojna (MGSVY) for the welfare of the downtrodden citizen across the state.

This scheme is aimed at the inclusive growth of the distressed sections of the society. It will be on the line of Antyodaya principles (Antyodaya' means rise of the last person) and will be implemented in the state's rural areas.

The objective of scheme is to identify poor and distressed households which have been deprived of the benefits of the various welfare schemes launched by state government. It will give distressed sections much need socially or economically or psychologically help.

Its purpose is to benefit 18 marginalized sections living in rural areas of state. It will provide benefit of welfare schemes for debt stressed farmers, poor families that have woman as sole bread earner, out-of-school children, martyred soldiers, families of AIDS patients, differently-abled, abandoned old persons, drug addicts etc.

It aims to will give more focus on encouraging voluntary organizations, various civil society organizations, Non-Resident Indians (NRIs) and other socially committed persons to contribute to the welfare of the downtrodden. Moreover, under the scheme will be no financial implication.

The information gathered through the helpline will then be used by the state government to crackdown on the drug, forest and mining mafias in the state.



Loan Agreement to Boost Rural Economy of Tamil Nadu

29 January '18

The Union Government has inked \$100 million Loan Agreement with World Bank for Project to Boost Rural Economy of Tamil Nadu. The loan is from the International Bank for Reconstruction and Development (IBRD) and has a 5-year grace period and maturity of 19 years.

Tamil Nadu Rural Transformation Project

The project aims to promote rural enterprises, facilitate their access to finance and create employment opportunities for youth, particularly women in selected blocks of Tamil Nadu across 26 districts. It will create enabling environment for producer organizations and enterprises to promote businesses across select value chains.

The project will be operational in 120 blocks across 3,994 villages in 26 Districts of Tamil Nadu with 411,620 direct beneficiaries. It will be rolled out in phased manner and in first phase 26 blocks will be covered in all project districts, followed by 52 blocks in second phase and remaining 42 blocks in third phase.

Under this project, communities will identify commodities and subsectors in the value chain for preparing business plans based on the analysis. 30% of the financing for these plans will be through matching grant program from project and remaining 70% will be leveraged from other financial institutions.

The project will work with targeted households that are already part of

Self-Help Groups (SHGs). It will also specifically support eligible households from socially and culturally disadvantaged groups to harness their existing assets, skills, and resources.

It will also test selected innovations and start-up ideas or scaled up them under newly created platform known as Tamil Nadu Rural Transformation Marketplace. This platform will identify, showcase and celebrate innovative solutions related to themes that have potential to impact rural economic growth in state.

Moreover, it will have e-governance architecture with use of ICT along with a robust Management Information System (MIS) to monitor and track results real time.

Loan Agreement to Improve Rural Connectivity in 5 States

31 January '18

The Union Government has inked \$250 Million Loan Agreement with Asian Development Bank (ADB) to Improve Rural Connectivity in 5 States viz. Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal under Pradhan Mantri Gram Sadak Yojana (PMGSY). The loan proceeds will be used to finance the construction of 6,254 kilometres all-weather rural roads in these 5 States under the PMGSY.

Key Facts

It is first tranche Loan of the \$500 million Second Rural Connectivity Investment Program for India approved by the ADB Board in December 2017. The program is aimed to improve rural connectivity, facilitate safer and more efficient access to livelihood and socio-economic opportunities for rural communities through improvements to about 12,000 kms Rural Roads across 5 States.

Significance of ADB-funded investment program

- ✎ Provide continued assistance to PMGSY and support the Government's long-term goal for rural development.
- ✎ It will have transformative impact in terms of rural economy and will bring greater efficiency in terms of access and connectivity for rural people in 5 States.
- ✎ Under it about 2,000 technical personnel will be imparted training on road safety and maintenance.
- ✎ It will also support Government's drive for innovative approaches to reduce costs, conserve non-renewable natural resources and promote use of waste materials in rural road construction.
- ✎ It builds upon \$800 million ADB-financed first Rural Connectivity Investment Program in 2012 that added about 9,000 kms of all-weather rural roads in the same States.
- ✎ The road designs under it take into account climate risks (such as increased rainfall and storm surges) with measures such as greater elevation of road embankments, slope protection, and better drainage.



Pradhan Mantri Gram Sadak Yojana (PMGSY)

PMGSY was launched in year 2000 as a Centrally Sponsored Scheme with an objective to provide single all-weather road connectivity to all eligible unconnected rural villages (habitations). The Union Ministry of Rural Development is nodal implementing authority. It was fully funded scheme by the central government.

Punjab Government discontinue the sale of 20 pesticides

02 February '18

Punjab Government's Department of Agriculture has issued directions to discontinue the sale of 20 pesticides (insecticides) including Endosulfan harmful to health of humans and environment with immediate effect. This decision was taken based on the recommendations of Registration Committee, Punjab Agricultural University (PAU) and Punjab State Farmers' Commission (PSFC).

Key Facts

The insecticides that are banned includes Trichlorofon, Phosphamidon, Dicolfol, Methomyl, Thiophanate Methyl, Benfuracarb, Bifenthrin, Endosulfan, Chlorfenapyr, Carbosulfan, Ethofenprox (Etofenprox), Phorate, Triazophos, Dazomet, Diflubenzuron, Fenitrothion, Metaldehyde, Kasugamycin, Alachlor and Monocrotophos.

Some of these pesticides (Phosphamidon, Methomyl, Phorate, Triazophos and Monocrotophos) are considered class I pesticides by World Health Organization (WHO) and are further categorised into extremely hazardous (class Ia) and highly hazardous (class Ib) to human health. Many of these are already banned in several countries.

Background

In India, use of several class I pesticides are still used which are banned by other countries. In 2015, based on the recommendations of Anupam Verma committee, Union Agriculture Ministry through an order of December 2016 had planned to ban only three out of these five class I pesticides and that too, starting from 2021.

Floating Treatment Wetland (FTW) in Hyderabad

05 February '18

The Floating Treatment Wetland (FTW) was inaugurated on World Wetlands Day (February 2) in Nekkampur Lake in Hyderabad to clean and purify the polluted waterbody. Plants planted on FTW can clean the lake by absorbing nitrates and other pollutants in the water.

Key Facts

FTW is joint effort of NGO Dhruvansh, Hyderabad Metropolitan Development Authority (HMDA), district administration and other organisations. It measures around 3,000 sq. ft and comprises four layers viz. floatable bamboo at base, styrofoam cubicles above it. The third layer consists of gunny bags and gravels on final layer to support cleaning agents (plants). Cleaning agents planted on FTW include vetivers, cattails, canna, bulrush, citronella, hibiscus, fountain grass, flowering herbs, tulsi and ashvagandha.

FTW's working is based on soil-less hydroponics technique. Hydroponics permits plants to grow only on sunlight and water. There is no need of soil. There are small holes at bottom of base which facilitates flow of nutrients from water to plants through biological uptake process.

Micro-organisms growing on FTW and plant root systems of cleaning agents break down and consume organic matter in water through microbial decomposition. The root systems filter out sediments and pollutants, reduce content of these chemicals from waterbody.



Rhodendron Park in Arunachal Pradesh

07 February '18

Foundation stone of Rhodendron Park was laid in Tawang district of Arunachal Pradesh by Chief Minister Pema Khandu. Tawang district was once home to about 100 species of rhododendron but now they have been reduced to only 50 plus species due to construction activities in border areas.

Important points

The park will be built in total area of 1.15 hectares. It will be partly funded under border area development programme (BADP). More than 30 species of rhododendrons would be planted and conserved in park where terrace cutting to raise the beauty and scenic component.

The park will also have modern nursery, information center on rhododendron, resting sheds, public toilet facility, vehicle parking facility, signage and lightings and iron security gate. It will add to the scenic enhancement of city and also offer an opportunity for conservation of rhodo species, which are under serious threat due to various ongoing road and land acquisition projects.



State Health Index by NITI Aayog

10 February '18

Kerala tops the list of large States in overall health performance based on the health index released by NITI Aayog as part of its 'Healthy States, Progressive India' report. Punjab and Tamil Nadu were ranked second and third among 21 large States evaluated on the basis of various health indicators such as neonatal mortality rates, under-five mortality rate, full immunisation coverage and institutional deliveries. Jharkhand, J&K and Uttar Pradesh are top-three ranking States in terms of annual incremental.

Best performance

Among small States, Mizoram ranked first followed by Manipur on overall performance, while Manipur followed by Goa were the top-ranked States in the annual incremental performance.

Developed by NITI Aayog, with technical assistance from the World Bank, and in consultation with the Health Ministry, the health index ranks States and Union Territories on their year-on-year incremental change in health outcomes as well as their overall performance with respect to each other.

The health index is a weighted composite index, which for the large States, is based on indicators in three domains: health outcomes (70 per cent), governance and information (12 per cent) and key inputs and processes (18 per cent). Among UTs, Lakshadweep showed both the best overall performance as well as the highest annual incremental performance. The incremental measurement revealed that about

one-third of the States, including the top-ranked Kerala, have registered a decline in their performance in 2016 as compared to 2015, stressing the need to pursue domain-specific, targeted interventions. However, the report also noted that it is a challenge for States with high index scores to even maintain their performance levels while it is much easier for States with low levels of development to notch up high incremental changes. Common challenges for most States and UTs include the need to focus on addressing vacancies in key staff, establishment of functional district Cardiac Care Units, quality accreditation of public health facilities and institutionalisation of Human Resources Management Information System.

N C Asthana new Kerala Vigilance chief

15 February '18



The Kerala government has decided to appoint DGP Nirmal Chandra Asthana as the new director of the State Vigilance and Anti-Corruption Bureau.

A decision has been taken in this regard, sources at the office of Chief Minister Pinarayi Vijayan said.

Asthana, a 1986 batch IPS officer, is now on Central deputation. He has co-authored several books including one on internal security.

DGP (Law and Order) Loknath Behra was holding additional charge as vigilance director after Jacob Thomas was transferred from the post in March last year.

Asthana's appointment comes against the background of a report based on an RTI document that the state government appointed Behra as vigilance director without seeking permission from the Ministry of Home Affairs.

Rupani inaugurates Air Odisha's first flight under UDAN scheme

17 February '18

Air Odisha launched its maiden flight under the Centres UDAN scheme, linking Mundra with Ahmedabad in Gujarat. Chief Minister Vijay Rupani launched the inaugural flight of the Bhubaneswar-based airline.

Air Odisha, which started services as a non-scheduled operator in November 2012, was granted the flying permit by the DGCA to launch flights under the Ude Desh Ka Aam Nagrik (UDAN), the Centres regional connectivity scheme (RCS).

It has bagged 50 routes under the RCS.



Burning Topics of the Month

India has joined Ashgabat Agreement

India and Oman signed eight Memorandums of Understanding (MoU)

Tanzania withdraws from UN refugee programme

& Many More...

◀ Global Centre for Cybersecurity ▶

24 January '18



The World Economic Forum (WEF) has launched the Global Centre for Cybersecurity to safeguard the world from hackers and growing data breaches. The centre will help bring all the stakeholders together in warding off cyber criminals.

Global Centre for Cybersecurity

- ✎ Headquartered in Geneva, the centre will become operational from March 2018.
- ✎ Initially, the centre will reach out to key industry players and G-20 countries to make this platform a success for dialogue and real-time action on cyber threats.

What is the need of such centre?

Cyber breaches recorded by businesses are on the rise. In the last five years, cyber threats have almost doubled to an average of 130 breaches per business in 2017. Professional cyber criminals target high-value organisations like banks.

Immediate action is needed to create a safe operating environment for new technologies like Artificial Intelligence, Robotics, Drones, Self-Driving cars and the Internet of Things (IoT).

MoUs Between India and Vietnam

25 January '18

India and Vietnam have signed two Memorandum of Understandings (MoUs) to enhance cooperation in field of information and broadcasting and space cooperation. The MoUs were signed following bilateral meeting between PM Narendra Modi and his visiting counterpart Nguyen Xuan Phuc ahead of the India-Asean Commemorative Summit in New Delhi. Vietnam is a key pillar in India's Act East Policy and strategic partner in South East Asia.

List of MoUs

MoU to enhance cooperation in field of information and broadcasting: It aims to enhance cooperation in the field of information and broadcasting, based on principles of equality and reciprocity pursuant to their national laws and regulations.

MoU on space cooperation: It is implementation arrangement between ISRO and National Remote Sensing Department of Vietnam.

It seeks to establish tracking and data reception station and data processing facility in Vietnam under ASEAN India Space Cooperation.

It will define framework and conditions of cooperation for establishment of facility to provide Indian remote sensing satellite data over ASEAN region. It will enable remote sensing applications, which include natural resources management, ocean development and disaster management to ASEAN member states.

Delhi Declaration

27 January '18

ASEAN

ASEAN is regional intergovernmental organisation comprising ten Southeast Asian countries which promotes Pan-Asianism and intergovernmental cooperation and facilitates economic, political, security, military, educational and socio-cultural integration amongst its members and other Asian countries.

It consists of 10-member countries- Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. It was established on August 8, 1967 through ASEAN declaration (also known as Bangkok Declaration). Its secretariat is located in Jakarta, Indonesia.



The ASEAN-India Commemorative Summit was held in New Delhi to celebrate the 25th anniversary of the establishment of sectoral dialogue between two sides under the theme of “Shared Values, Common Destiny”. It issued joint statement titled Delhi Declaration after the plenary session focusing on counter-terrorism, identity security, military cooperation, and bilateral financial support.

India and 10 ASEAN countries for first time mentioned cross-border movement of terrorists and made commitment to counter the challenge through close cooperation as part of the declaration.

Key Highlights of Delhi Declaration

Strengthening relations: Called for strengthening and deepening ASEAN-India Strategic Partnership for mutual benefit, across the whole spectrum of political-security, economic, socio-cultural and development cooperation.

Terrorism: Deepen cooperation in combating terrorism in all its forms and manifestations, violent extremism and radicalisation through information sharing, law enforcement cooperation and capacity building under existing ASEAN-led mechanism.

Cyber-security: Strengthen cooperation on cyber-security capacity building and policy coordination, including through supporting the implementation of ASEAN Cybersecurity Cooperation Strategy.

Transnational crimes: It called for strengthening cooperation to combat other transnational crimes, including people smuggling, trafficking in persons, illicit drug trafficking, cybercrime, and piracy and armed robbery against ships.

Political and Security Cooperation: Reaffirm importance of maintaining and promoting peace, stability, maritime safety and security, freedom of navigation and overflight in the region.

It calls for other lawful uses of seas and to promote peaceful resolutions of disputes, in accordance with universally recognised principles of international law, including 1982 United Nations Convention on the Law of the Sea (UNCLOS).

Economic Ties: Both sides reaffirmed to work to further strengthen ASEAN-India economic relations, including through full utilisation and effective implementation of ASEAN-India Free Trade Area. They also called for swift conclusion to comprehensive and mutually beneficial Regional Comprehensive Economic Partnership (RCEP) in 2018 to further trade ties. They also look forward to establish ASEAN-India Trade and Investment Centre.

Physical and digital connectivity: Reaffirmed their commitment to enhance physical and digital connectivity in line with Master Plan on ASEAN Connectivity 2025 and ASEAN ICT Masterplan (AIM) 2020 by availing \$1-billion line of credit (LoC) announced by India. They will also work towards encouraging early completion of India-Myanmar-Thailand (IMT) Trilateral Highway Project and extend it to Cambodia, Lao PDR and Vietnam.

Conservation and sustainable use of marine resources in Indian and Pacific Oceans and address threats to these resources including illegal, unreported and unregulated fishing, loss of coastal ecosystems and the adverse impacts of pollution, marine debris and ocean acidification.

Maritime cooperation: It emphasised need to promote maritime transport cooperation and encourage potential private sector participation in development of seaports, maritime logistics network and maritime services in order to create greater efficient linkages and continue discussions on these priority areas.

MSMEs: It calls for promotion of stable and sustainable growth for MSMEs, including through technology transfer, as well as enhancing capacity building, technical assistance, access to innovation and opportunities to integrate into global and regional value chains were agreed upon.

Peaceful exploitation of outer space: India and ASEAN countries will continue to collaborate in peaceful exploitation of outer space, through implementation of the ASEAN-India Space Cooperation Programme. It will include launching of satellites, sustainable exploitation of ground, sea, atmospheric and digital resources for equitable development of region.

Agreements between India and Cambodia

28 January '18

India and Cambodia have signed four agreements to boost bilateral cooperation between both countries. The agreements were signed after comprehensive talks between Prime Minister Narendra Modi and his Cambodian counterpart Samdech Hun Sen in New Delhi.

Key Takeaways from comprehensive talks

Defence, security and counter-terrorism: Both leaders held talks to boost ties in key areas of defence, security and counter-terrorism and called for concerted global efforts to eliminate terrorism, including blocking terror financing and dismantling terrorist bases.

Enhance bilateral defence ties: They agreed to further enhance bilateral defence ties, including through exchanges of senior-level defence personnel and capacity building projects. They also discussed exploring ways to intensify development partnership and boost ties in key sectors, including trade and investment, energy conservation, agriculture, and tourism and culture.

Maritime Security: They also expressed keen interest in enhancing cooperation in maritime domain, including preservation of coastal and marine environment, anti-piracy cooperation, security of sea lanes of communication to maintain peace and ensure safety and security of navigation in Indo-Pacific Region. They also supported complete freedom of navigation and overflight and pacific resolution of maritime issues based on international law.



Background

India-Cambodia bilateral relations are warm and cordial. The relations go back to 1st century AD when Hindu and Buddhist religious and cultural influences emanated out of India to various parts of Southeast Asia. Cambodians are predominantly Buddhist but retain strong influence of Hindu mythology, rituals and idolatry.

Agreements signed are

- ✎ **Cultural Exchange Programme (CEP):** It seeks to promote cultural exchange and strengthen the friendly relations between both countries.
- ✎ **Credit Line Agreement:** It was signed between India's EXIM Bank Government of Cambodia for Line of Credit (LoC) to finance Stung Sva Hab Water Resource Development Project for US\$ 36.92 million.
- ✎ **Mutual Legal Assistance in Criminal Matters:** It seeks to improve effectiveness of both countries in prevention, investigation and prosecution of crimes through cooperation and legal assistance in criminal matters.
- ✎ **MoU on Cooperation for Prevention of Human Trafficking:** It seeks to increase bilateral cooperation on issues of prevention, rescue and repatriation related to human trafficking.

India joins Ashgabat Agreement

02 February '18

India has joined Ashgabat Agreement which envisages facilitation of transit and transportation of goods between Central Asia and the Persian Gulf to significantly boost up trade and investment. Ashgabat Agreement aims at establishment of International Transport and Transit Corridor between the Iran, Oman, Turkmenistan and Uzbekistan. It was signed in April 2011 and is named after capital of Turkmenistan, Ashgabat. It establishes international transport and transit corridor between Central Asia and the Persian Gulf countries. Pakistan is also its member since October 2016.



Significance of this Agreement

- ✎ It will enable India to utilise this existing transport and transit corridor to facilitate trade and commercial interaction and ties with Central Asia and Eurasian region.
- ✎ It will synchronise India's efforts to implement the International North South Transport Corridor (INSTC) for enhanced connectivity.
- ✎ It will provide India an opportunity for reorientation of the freight traffic from the traditional sea route to land transcontinental routes.

National Heritage Festival in Riyadh

09 February '18

King Salman bin Abdulaziz in presence of External Affairs Minister Sushma Swaraj inaugurated 32nd edition of Saudi Arabia's National Heritage Festival in Janadriyah village, Riyadh. This year India is guest of honor country.

About Jenadriyah

Jenadriyah is cultural and heritage festival of Saudi Arabia. It is held annually at Jenadriyah village near Riyadh. It was held for first time in 1985. It draws more than one million visitors every year.

The festival normally falls during the month of February or March. In festivals include camel race, horse race, sports, dance, arts, history, crafts. The India Pavilion at festival was based on the theme 'Saudi ka dost Bharat'. It showcased traditional and modern aspects of India and its culture.



The activities include falconry, and traditional arts and crafts. The India Pavilion at festival was based on the theme 'Saudi ka dost Bharat'. It showcased traditional and modern aspects of India and its culture.

India-Saudi Arabia relations

Saudi Arabia is India's fourth largest trade partner after China, US and UAE. It is a major source of India's energy security requirement as it accounts for almost one-fifth of India's crude oil requirement. The volume of bilateral trade between both countries during 2016-17 was recorded at \$25.079 billion. Saudi Arabia is home to more than 3 million Indian people.

Agreements between India and Oman

10 February '18

India and Oman signed eight Memorandums of Understanding (MoU) to expand cooperation in different sectors including defence and tourism.

The agreements were signed during Indian Prime Minister Narendra Modi's maiden visit to the Gulf nation. During the visit, Modi held delegation-level talks with the Sultan of Oman, Qaboos bin Said al Said on measures to strengthen cooperation between the two nations in trade and investment, energy, defence, security, food security and regional issues.

Following MoUs were signed during the meet:

1. Agreement on legal and judicial cooperation in civil and commercial matters.
2. Agreement on mutual visa exemption for holders of diplomatic, special, service and official passports.
3. MoU on cooperation in the field of Health.
4. MoU for cooperation in the peaceful uses of outer space.
5. MoU on cooperation between Foreign Service Institute, Ministry of External Affairs, India and Oman Diplomatic Institute.
6. MoU on academic and scholarly cooperation sectors between National Defence College, Sultanate of Oman and the Institute for Defence Studies and Analyses.
7. MoU in the field of Tourism Cooperation between India and Oman.
8. Annexure to the MoU on Military Cooperation.



11 February '18

MoUs between India and Palestine



India and Palestine have signed six Memoranda of Understanding (MoUs) in different areas including health and education. The MoUs were signed after bilateral talks between Prime Minister Narendra Modi and Palestinian President Mahmoud Abbas at Ramallah. PM Modi had reached Ramallah, capital of Palestine via helicopter from Jordanian capital Amman becoming the first Indian Prime Minister to visit Palestine. He was conferred Grand Collar of the state of Palestine, the highest order given to foreign dignitaries.

Signed agreements are

- ✎ MoU for setting up of India-Palestine Super-specialty hospital at Beit Sahour in Bethelhem Governorate.
- ✎ MoU for construction of Turathi: India Palestine Centre for Empowering women.
- ✎ MoU for setting up of new National Printing Press at Ramallah.
- ✎ MoU for Construction of school in Muthalth Al Shuhada Village.
- ✎ MOU for construction of school in Tamoon village in Tubas Governorate.
- ✎ MoU for providing assistance for construction of additional floor to Jawahar Lal Nehru for Boys at Abu Dees.

MoU'S between India and UAE 12 February '18

India and the United Arab Emirates (UAE) signed five Memorandum of Understanding (MoUs) in key areas during PM Narendra Modi's visit to Abu Dhabi.

The MoUs were signed in key areas of energy sector, railways, manpower and financial services.



MoU between Indian Consortium (OVL, BPRL & IOCL) and ADNOC

- ✎ An MOU was signed between Indian Consortium (OVL, BPRL & IOCL) and Abu Dhabi National Oil Company (ADNOC) for acquisition of 10 per cent participating interest in the offshore Lower Zakum Concession. The concession will be for 40 years from 2018 to 2057.
- ✎ Under the MoU, 60 per cent of the participating interest will be retained by ADNOC and remaining 30 per cent will be awarded to other International oil companies. This is the first Indian Investment in upstream oil sector of UAE.

MoU in the field of Manpower

- ✎ Indian Government and Government of UAE signed a MoU in the field of Manpower with an aim to institutionalise the collaborative administration of contractual employment of Indian workers in UAE.
- ✎ Under the MoU, both the sides will work together to integrate their labour related e-platforms for ending the existing malpractices, combat trafficking and organize programs for education of workers.

MoU for Technical Cooperation

- ✎ An MoU was signed between Railways Ministry of India and Federal Transport Authority - Land & Maritime of UAE for technical cooperation in Rail Sector. The MoU aims at cooperation in Infrastructure sector especially Railways.
- ✎ It will facilitate development of joint projects, knowledge sharing, joint research and technology transfer. It also envisages formation of a Joint Working Group for institutionalising the cooperation mechanism.

MoU for bilateral cooperation in the field of finance

- ✎ With an aim to extend the bilateral cooperation in the field of finance, an MoU was signed between Bombay Stock Exchange (BSE) and Abu Dhabi Securities Exchange (ADX). It aims to enhance cooperation between both the countries in financial services industry.
- ✎ It will facilitate investment in financial markets by investors from both the countries.

MoU between Jammu and Kashmir and DP World

An MoU between Jammu and Kashmir Government and DP World, UAE was signed to establish multi-modal logistics park and hub in Jammu comprising warehouses and specialized storage solutions.

17 February '18

India and Iran signs Double Taxation Avoidance Agreements (DTAA)

India and Iran on signed Double Taxation Avoidance (DTAA) and the prevention of fiscal evasion with respect to taxes on income. The information was shared by the Central Board of Direct Taxes (CBDT).

The agreement is on the same line as the previous agreements entered into by India with other nations. It was signed in the presence of Indian Prime Minister Narendra Modi and Iranian President Hassan Rouhani, who arrived in India on February 15, 2018 for a three day visit.



Significance

- ✎ The pact will stimulate flow of investment, technology and personnel from India to Iran as well as from Iran to India and will prevent double taxation.
- ✎ It will also provide for exchange of information between the two contracting parties as per latest international standards.
- ✎ It will also improve transparency in tax matters and will help curb tax evasion and tax avoidance.
- ✎ The agreement also meets treaty related minimum standards under G-20 OECD Base Erosion and Profit Shifting (BEPS) project, in which India participated on an equal footing.

19 February '18

Saudi Arabia allows women to open business without male consent

The Kingdom of Saudi Arabia announced a major policy change by allowing women to open their own businesses without the need of showing consent from a husband or male relative.

The announcement was made by the country's Ministry of Commerce and investment, which stated on its website that women can now launch their own businesses and benefit from governmental e-services without having to prove consent from a guardian.

Significance

- ✎ The move marks a major step away from the strict guardianship

system that has ruled the country for decades.

- ✎ Under Saudi Arabia's guardianship system, women are required to present proof of permission from a male guardian, a husband, father or brother, to do any government paperwork, travel or enrol in classes.
- ✎ It is also a significant move on the part of the Saudi government to create a gender-neutral society.
- ✎ The development is also in line with Saudi Arabia's effort to expand its fast-growing private sector.



- ✎ The oil-rich nation, which has been long dependent on crude oil production for economic revenue, is pushing to expand its private sector, including an expansion of female employment under its new reform plan for a post-oil era.

Tanzania withdraws from UN refugee programme

19 February '18

Tanzania has decided to withdraw from UN refugee programme for reasons of security and lack of funds. Tanzania has long been considered a safe haven for refugees, particularly from Burundi and the Democratic Republic of Congo.

About UN refugee programme:

The New York Declaration lays out a vision for a more predictable and more comprehensive response to these crises, known as the Comprehensive Refugee Response Framework, or

CRRF. It calls for greater support to refugees and the countries that host them. The New York Declaration for Refugees and Migrants is a milestone for global solidarity and refugee protection at a time of unprecedented displacement across the world.

- ✎ Adopted by all 193 Member States of the United Nations in September 2016, it contains historic and wide-ranging commitments that reaffirm the commitment by Member States to respect the human rights of refugees and migrants and to

support the countries that welcome them.

- ✎ UN's "comprehensive refugee response framework" provides lasting solutions for refugees, including integration into host communities. The framework approach is based on the idea that refugees should be included in their host communities. When refugees have access to education and the right to work legally, they can develop their skills and be more self-reliant, contributing to the local economy.

Burning Topics of the Month

India becomes the world's third largest steel producer in 2017

Double Taxation Avoidance Agreement (DTAA) between India and China

11,300 Crore Scam in PNB: Explained

& Many More...

AU Small Finance Bank has signed a MoU with LIC

21 January '18



Banking finance company AU Small Finance Bank has signed an MoU with LIC to offer Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY). Under the MoU, LIC

will give a life cover of ₹2 lakh in case of death to the customer at a nominal premium of ₹330 per annum.

The aim is to provide best services to the customers under one roof. Pradhan Mantri Jeevan Jyoti Bima Yojana is a government-backed Life insurance scheme in India. As of May 2015, only 20% of India's population has any kind of insurance, this scheme aims to increase the number. It is available to people between 18 and 50 years of age with bank accounts.

NIIF has partnered with DP World

23 January '18

NIIF has partnered with DP World to create an investment platform for ports, terminals, transportation and logistics businesses in India. The platform will invest in opportunities in the ports sector, and beyond sea ports into areas such as river ports and transportation, freight corridors, port-led special economic zones, inland container terminals, and logistics infrastructure including cold storage. NIIF was set-up to function as a major platform in India for attracting foreign investments. The NIIF is being operationalized by establishing three Alternative Investment Funds (AIFs) under the SEBI Regulations. The proposed corpus of NIIF is Rs. 40,000 Crores (around USD 6 Billion). GOI's contribution to the AIFs under the NIIF scheme shall be 49% of the total commitment. NIIF has mandate to solicit equity participation from strategic anchor partners, like overseas sovereign/quasi-sovereign/multilateral/bilateral investors.

Indian Overseas Bank has signed a MOU with National Housing Bank

25 January '18

Indian Overseas Bank announced an MOU with National Housing Bank for Implementation of the Rural Housing Interest Subsidy Scheme (RHIS) of the Ministry of Rural Development (MoRD), Government of India.

IOB is one of first major public sector bank to execute the MOU to implement the Scheme. With the association, the bank will be able to extend the benefit of the RHIS scheme to its rural home loan customers of its 923 rural branches spread across India.



Indian Overseas Bank (IOB)

- ✎ Major public sector bank
- ✎ Headquartered - Chennai (Madras)
- ✎ CEO: R. Subramania kumar
- ✎ Tagline : Good People to grow with

The aim of the RHIS is to provide subsidy for the Housing loans to the households living in rural areas that are availed for construction and modifications of their dwelling units. The interest subsidy under the scheme is at 3.00%p.a for a loan amount of Rs. 2 lakhs with repayment period upto 20 years.

World Economic Forum's Inclusive Development Index

India was ranked at the 62nd place among emerging economies on an Inclusive Development Index. Norway remains the world's most inclusive advanced economy, while Lithuania again tops the list of emerging economies. Inclusive Development Index is the yearly index released by World Economic Forum (WEF).

The index takes into account the “living standards, environmental sustainability and protection of future generations from further indebtedness.”. It urged the leaders to urgently move to a new model of inclusive growth and development, saying reliance on GDP as a measure of economic achievement is fuelling short-termism and inequality. India was ranked 60th among 79 developing economies last year. The 2018 index, which measures progress of 103 economies on three individual pillars — growth and development; inclusion; and inter-generational equity — has been divided into two parts. The first part covers 29 advanced economies and the second 74 emerging economies.

The index has also classified the countries into five sub-categories in terms of the five-year trend of their overall Inclusive Development Growth score — receding, slowly receding, stable, slowly advancing and advancing. Despite its low overall score, India is among the ten emerging economies with ‘advancing’ trend. Only two advanced economies have shown ‘advancing’ trend.

Among advanced economies, Norway is followed by Ireland, Luxembourg, Switzerland and Denmark in the top five. Small European economies dominate the top of the index, with Australia (9) the only non-European economy in the top 10. Of the G7 economies, Germany (12) ranks the



highest. It is followed by Canada (17), France (18), the UK (21), the US (23), Japan (24) and Italy (27).

The top-five most inclusive emerging economies are Lithuania, Hungary, Azerbaijan, Latvia and Poland. Performance is mixed among BRICS economies, with the Russian Federation ranking 19th, followed by China (26), Brazil (37), India (62) and South Africa (69).

Of the three pillars that make up the index, India ranks 72nd for inclusion, 66th for growth and development and 44th for inter-generational equity.

The neighbouring countries ranked above India include Sri Lanka (40), Bangladesh (34) and Nepal (22). The countries ranked better than India also include Mali, Uganda, Rwanda, Burundi, Ghana, Ukraine, Serbia, Philippines, Indonesia, Iran, Macedonia, Mexico, Thailand and Malaysia.

Although China ranks first among emerging economies in GDP per capita growth (6.8 per cent) and labour productivity growth (6.7 per cent) since 2012, its overall score is brought down by lackluster performance on inclusion.

27 January '18

India to grow at 7.4% of its GDP in 2018: World Economic Outlook

In its latest World Economic Outlook (January 2018 update) released by International Monetary Fund (IMF), India is projected to grow at 7.4% of its gross domestic product (GDP) in 2018 as against China's 6.8%. The projection makes India fastest growing major economy following slowdown in 2017 due to demonetisation and implementation of goods and services tax (GST).

Key Facts

IMF has projected that global economy is expected to grow 3.9% this year, faster than 3.7% forecast earlier in October 2017. Some 120 economies, accounting for three quarters of world GDP, have seen pickup in growth in year-on-year terms in 2017. It is the broadest synchronised global growth upsurge since 2010.

IMF projected India's GDP growth rate at 7.4% in 2018 and 7.8% in 2019. China, during the same period, is expected to grow at 6.8% and 6.4% respectively. The aggregate growth

forecast for emerging markets and developing economies for 2018 and 2019 remain unchanged, with marked differences in outlook across regions.

Emerging and developing Asia will grow at around 6.5% over 2018-19, broadly the same pace as in 2017. The US will grow 2.7% and 2.5% in 2018 and 2019, respectively, higher by 0.4 and 0.6% point than earlier estimate.

World Economic Outlook (WEO)

The report contains analysis and projections of integral elements of IMF's surveillance of economic developments and policies in its member countries and of developments in global financial markets and economic system. It is usually prepared twice a year and is used in meetings of the International Monetary and Financial Committee.

Small Finance Banks and Payments Banks to offer Atal Pension Yojana (APY).

28 January '18

The Union Government has allowed Small Finance Banks and Payments Banks to offer Atal Pension Yojana (APY).

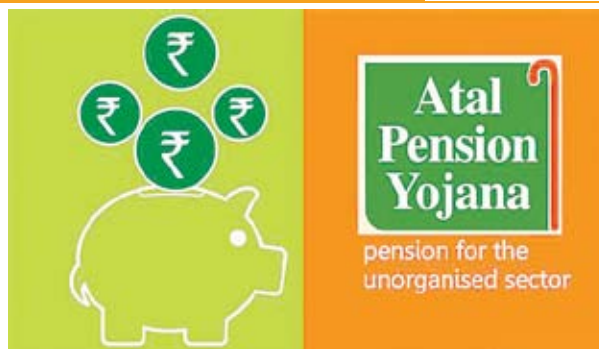
The Payments Banks and Small Finance Banks are a new model of banks conceptualised by the Reserve Bank of India (RBI). In total, 11 Payment Banks and 10 Small Finance Banks have received the license from Reserve Bank of India to start banking operations in India.

Significance

The Small Finance Banks and Payment Banks are new age banks and given the strength, expertise and reach of these banks, they can play a pivotal role in the outreach of subscribers under APY.

Key Objective

- ✎ The decision of allowing the Small Finance Banks and Payments Banks to offer APY is mainly aimed at strengthening the existing channels of APY distribution.
- ✎ These banks are expected to provide a boost to the outreach of subscribers under APY.
- ✎ With their participation, the government would not only be able to build a pensioned society but also add sustainable fee income to Banks by offering attractive incentives for mobilizing APY, at Rs 120-150 per account.
- ✎ At present, over 84 lakh subscribers are registered under the APY scheme with an asset base of more than Rs 3194 crore.



About Atal Pension Yojana (APY)

The social security scheme was launched on May 9, 2015. It is the Union Government's first-ever guaranteed pension product to the people of the nation.

It is available to people falling in the age group of 18 to 40 years.

Under the scheme, the subscriber would receive a minimum guaranteed pension of 1,000 to 5,000 rupees per month from the age of 60 years depending upon the contribution.

India becomes the world's third largest steel producer in 2017 30 January '18

According to recent report published by World Steel Association (WSA), India has overtaken US to become the world's third largest steel producer in 2017. India's crude steel production has grown by 6.2% to 101.4 million tonnes (MT) in 2017 compared to 95.5 MT in the previous year.

Key Facts

China has remained world leader by producing 831.7 MT in 2017, up 5.7% from 786.9 MT in the year-ago period. Japan is second largest global steel producer and had witnessed negative growth in steel output declined by 0.1% to 104.7 MT in 2017 from 104.8 MT in 2016.

The Global steel production had reached 1,691.2 MT in 2017, up by 5.3% compared to 2016 when output was 1,606.3 MT. Crude steel production increased in all regions in 2017 except in CIS (Commonwealth of Independent States), which has remained stable.



World Steel Association (WSA)

WSA is a non-profit organisation and is one of the largest industry associations in world. Its members represent approximately 85% of the world's steel production. It includes over 160 steel producers with 9 of the 10 largest steel companies, national and regional steel industry associations, and steel research institutes. It was founded in July 1967 and is headquartered in Brussels, Belgium.

CriSidEx, India's first MSE Sentiment Index

The SIDBI (Small Industries Development Bank of India) and ratings agency Crisil have launched CriSidEx, India's first MSE Sentiment Index for micro, small and medium enterprises (MSMEs). The index will help to indicate the current state and expected outlook on the MSME sector every quarter.

Significance of index

- ✎ Provide crucial insights into employment, business environment and foreign trade in MSME sector.
- ✎ Allow policy makers to take timely proactive steps, including those based on early warnings thrown up by survey of index.
- ✎ Provide intelligence and insights for regulators, trade bodies, lenders as well as economic and financial analysts.
- ✎ Help in forecasting business environment by capturing sentiment on various business parameters such as business situation, capacity utilisation, order book and margins.
- ✎ Flag potential headwinds and changes in production cycles in MSME sector and thus help in improving market efficiencies.

About CriSidEx

CRISIL-SIDBI MSE Sentiment Index (or CriSidEx) has been developed jointly by CRISIL and SIDBI. It is a composite index based on diffusion index of 8 parameters. It measures MSE business sentiment on a scale of 0 (extremely negative) to 200 (extremely positive).

The parametric feedback for the index will be captured through a survey of 1100 MSEs.

06 February '18

Department of Industrial Policy and Promotion (DIPP) under Commerce Ministry has unveiled Start-up-India ranking framework to rank states/UTs based on measures regions that have taken to foster entrepreneurship. It was launched by Union Minister of Commerce and Industry.

Objective of Startup States and UTs Ranking Framework

The framework aims to foster competitiveness and propel states/UTs to act proactively in startup matters. This ranking will help states to bring progress made in their startup ecosystem and also make different states learn and replicate good practices.

Its objective is to encourage States/UTs to take proactive steps towards strengthening Startup ecosystems at local level. It will also measure impact of each step initiated at local level for building strong Startup ecosystem. It will also enable continuous learning through the dissemination of good practices. It also gives greater thrust like seed funding support, women entrepreneurship.



Start-up-India
ranking
framework

Background

India is home to about 20,000 startups, with about 1,400 beginning operations every year. They are driving economic growth and also leading to technological innovations and employment generation in every state. Entrepreneurs in these startups are introducing new solutions everyday and also are improving existing processes. Thus, this framework will encourage and help startups and help government to create policies for ease of doing business for startups.

Development Impact Bond

07 February '18

Britain's Prince Charles has launched a new 10-million-dollar Development Impact Bond (DIB) to help improve education for over 200,000 children in India. The DIB is the largest bond of its type in South Asia. It is the latest fundraising initiative by British Asian Trust (BAT) set up by royal 10 years ago to fight poverty in South Asia.

Key Notes

The DIB was announced on occasion of celebration of 10th anniversary of BAT. It was launched by trust with support of UK government's Department for International Development (DfID), Comic Relief, Mittal Foundation and UBS Optimus Foundation.

The DIB is intended as result-oriented way to attract new capital into development projects, with strong emphasis on data and evidence. It is intended to improve literacy and numeracy learning levels for primary school students from marginalised communities in country.

Under the initiative, DIB will provide funding to local not-for-profit delivery partners in India over 4 years period to deliver range of operational models including principal and teacher training, direct school management, and supplementary programmes.

Double Taxation Avoidance Agreement (DTAA) between India and China

08 February '18

The Union Cabinet has approved signing and ratification of protocol amending Double Taxation Avoidance Agreement (DTAA) between India and China. The DTAA aims for avoidance of double taxation and prevention of fiscal evasion with respect to taxes on income and update the provisions on exchange of information of the DTAA to the latest international standards.



Important points

The amending protocol updates existing provisions of DTAA for exchange of information to the latest international standards. It also incorporates changes required to implement treaty related minimum standards under Action reports of Base Erosion & Profit shifting (BEPS) Project, in which India also had participated. It will also bring in changes as per BEPS Action reports as agreed upon by two countries.

Background

In 2016, India had signed multilateral convention to implement measures to prevent shifting of profits by multinational companies (MNCs) to low-tax nations as way to avoid paying taxes. It was outcome of Organisation for Economic Cooperation and Development (OECD)/G20 BEPS project.

The convention aims to BEPS through tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax nations where there is little or no economic activity, resulting in little or no overall corporate tax being paid.

Rs.136 crore fine imposed on Google

10 February '18

The Competition Commission of India (CCI) has imposed Rs.136 crore fine on world's most popular search engine Google for unfair business practices in Indian market for online search. The penalty was imposed on Google for infringing anti-trust conduct.

The Ruling

CCI held that Google was found to be indulged in practices of search bias and by doing so it has caused harm to its competitors as well as to users. It also held that Google was leveraging its dominance in market for online general web search, to strengthen its position in market for online syndicate search service. The penalty amount imposed translates to 5% of company's average total revenue

generated from India operations from its different business segments for financial years 2013, 2014 and 2015.

Background

CCI passed the penalty order on complaints filed in 2012 by Matrimony.com and Consumer Unity & Trust Society (CUTS) in 2012. It was alleged that Google is indulging in abuse of dominant position in market for online search through practices leading to search bias and search manipulation, among others.

CCI's ruling comes after similar anti-trust setbacks for Google in European Union and Russia. In 2017, in similar case EU's anti-trust arm had fined Google \$2.7 billion for promoting its own products over others. Google also had settled an anti-trust matter in Russia out of court.

India Post Payments Bank to enable Digital Payments in Post Offices

The India Post Payments Bank (IPPB) announced that it will enable Digital Payments in Post Offices by April 2018, as scheduled earlier. The announcement came after some sections of the media reported revision in timelines of the India Post Payments Bank Expansion Programme.

Key Highlights

- Once the proposed India Post Payments Bank Expansion Programme is accomplished, IPPB will be providing the largest financial inclusion network in the country, covering both urban as well as rural surroundings.
- It will provide digital payment services at the doorstep with the help of Postmen and Gramin Dak Sewaks (GDS).
- IPPB will also enable more than 17 crore active account-holders of Post Office Savings Bank to make digital payments including the benefit of NEFT, RTGS, UPI and bill payment services.
- It will also enable acceptance of digital payments across post offices in the country in line with the digital payments initiative of the Union Government.



About IPPB

- The India Post Payments Bank was incorporated on August 17, 2016 under Companies Act, 2013 as a public limited company with 100 per cent Government of India equity under Department of Posts.
- IPPB launched its branches in Ranchi and Raipur on January 30, 2017 and proposes to open total of 650 branches with the objective of being present in all corners of India.

11,300 Crore Scam in PNB: Explained

16 February '18

India's Punjab National Bank (PNB) stated that it has detected fraudulent transactions worth over Rs 11,300 crore at its Mumbai branch. The amount is nearly 1/3rd of the bank's total market capitalisation of Rs 36,000 crore. It is also 8 times of bank's fiscal year 2017 net profit of Rs 1,324 crore. With the sharp fall, investors have reportedly lost Rs 3,844 crore of wealth on a single day.

The Scam

The bank has detected some fraud and unauthorised transactions (messages) in one of its branch in Mumbai for the benefit of a few select account holders with their apparent involvement. Based on these transactions other banks appear to have advanced money to these customers abroad. The quantum of transactions is approximately worth USD 1,771.69 billion.

Under Scanner

- The PNB has reportedly lodged two complaints with the Central Bureau of Investigation (CBI) against billionaire jewellery designer Nirav Modi and a jewellery company about fraudulent transactions.

- Jeweller Nirav Modi allegedly acquired fraudulent letters of undertaking from a PNB branch in Mumbai to secure overseas credit from other Indian lenders.

- While PNB did not name the other lenders, Union Bank of India, Allahabad Bank and Axis Bank are reported to have offered credit based on letters of undertaking (LOUs) issued by PNB.

- Modi, who figured in Forbes India's Richest People List 2016 with a net worth of \$1.74 billion, is already being investigated by the CBI for another alleged fraud involving Rs 280 crore at a PNB branch.

- Besides him, three other jewellers, Gitanjali, Ginni and Nakshatra are also under the scanner with the CBI and Enforcement Directorate looking at their arrangements with various banks and end use of money.

- The PNB has also suspended 10 of its officers.

- Foreign bank branches too are under investigation.

What is a Letter of Undertaking?

- It is a letter of assurance or guarantee issued by one bank to

branches of other banks to meet a liability on behalf of an importer, based on which foreign branches offer credit to buyers.

- An LoU involves four parties- an issuing bank, a receiving bank, an importer and a beneficiary entity overseas. It is used in international banking transactions.

- The issuer bank messages overseas branches of other banks through the Society for Worldwide Interbank Financial Telecommunication (SWIFT) network and that bank immediately pays the client against the LoU.

- The bank that holds the LoU then goes back to the issuer bank and gets its due.

- According to norms, the term of an LoU is 180 days, and can be rolled over once for six months.

- A SWIFT instruction, which represents a bank's consent, is cleared by a maker, a checker and a verifier before it is sent across.

- There is no reported instance so far of a breach in SWIFT instructions anywhere in the world.

Burning Topics of the Month

Veteran Indian tennis star Leander Paes won his 25th ATP Challenger level doubles title

Mary Kom claimed gold medal in the India Open International Boxing tournament

Mahendra Singh Dhoni became India's first and world's third wicketkeeper to take 600 catches

& Many More...

21 January '18

Manav Thakkar at World No.2 in the International Table Tennis Federation (ITTF) rankings

Manav Thakkar climbed to World No.2 in the boys' under-18 category while Diya Chitale rose to No. 5 in the girls' under 15 category in the International Table Tennis Federation (ITTF) rankings, which also have an unprecedented 17 Indian players in the top-50.

Thakkar's jump has been particularly phenomenal as he moved from 18th to his current position. The top place is within striking distance, which will become India's moment of crowning glory.

He has also broken into the top-15 in the boys' under-21 rankings because of his win in Slovenia. Among other successes, recently crowned Junior national champion Payas Jain has climbed to the 11th spot, and right behind him is Jeho H at No. 12. Another entrant into the top-50, Yashansh Malik currently placed at 46.

Snehit S (24), Manush Shah (33), Jeet Chandra (36) and Parth Virmani (43) also promise big things, making it into the upper echelons of the under-18 ITTF rankings.

24 January '18

Siddharth Pratap Singh has won the Swedish Open Junior Badminton Title



Young Indian shuttler Siddharth Pratap Singh secured his maiden international title, bagging the Swedish Open Junior International Series with a straight-game victory over Denmark's Mads Christophersen in the finals in Uppsala in Sweden.

Playing his first career final, Siddharth defeated Christophersen in a 33-minute match to claim the men's singles title.

25 January '18

Rakhi Halder has won the gold medal in the 33rd Women Senior National Weightlifting Championships

Rakhi Halder created a new national record in clean and jerk en route to a gold medal in the 63kg women's category in the 33rd Women Senior National Weightlifting Championships.



Rakhi lifted 128kgs in the clean and jerk for a total of 230kgs to create a new national record, bettering Karnam Malleswari's feat (127kg) created in Athens in 1999. The silver in this category went to S Thasana Chanu of Karnataka (202kg) while the bronze was clinched by AIPSCB's Amandeep Kaur (191kg).

The day concluded with a gold medal for R V Rahul of RSPB in 85kg men's division of the 70th Men National Weightlifting Championships. Rahul won the gold with a total lift of 335kg, while the silver and the bronze were bagged by Harshad Wadekar of Maharashtra (325kg) and K Ravi Kumar (323kg).

29 January '18

Indian boxing star Vijender Singh has risen four rungs to sixth in the latest WBO rankings for the super middleweight category

27 January '18



Indian boxing star Vijender Singh has risen four rungs to sixth in the latest WBO rankings for the super middleweight category. Vijender has successfully defended his WBO Asia Pacific and Oriental super middleweight belts against Ernest Amuzu of Ghana last month. The WBO super middleweight rankings are topped by Jesse Hart, the American super middleweight champion, followed by Brit Callum Smith. Smith, a 2010 Commonwealth Games silver-medallist, held the European, British, and WBC Silver super-middleweight titles from 2015 until last year. Following him in the fourth place is another Brit in Rocky Fielding.

Veteran Indian tennis star Leander Paes won his 25th ATP Challenger level doubles title

Veteran Indian tennis star Leander Paes won his 25th ATP Challenger level doubles title with partner James Cerretani after beating Denis Kudla and Treat Huey in the final of the Newport Beach event.



The second-seeded Indo-American pair defeated the American-Filipino combine 6-4 7-5 in the summit clash of the USD 150,000 hard court tournament.

Paes, world No 61, has won crucial 125 points with this win as he is striving to move up the rankings ladder. He had logged 90 points at the Australian Open, where he made the third round with compatriot Purav Raja.

Leander Adrian Paes is considered to be one of the best doubles and mixed doubles players of all time, having achieved a career Grand Slam in each discipline. He has won eight doubles and ten mixed doubles Grand Slam titles, and is the oldest man to have won a Grand Slam title. He holds a career Grand Slam in men's doubles and mixed doubles, and achieved the rare men's doubles/mixed doubles double at the 1999 Wimbledon tournament. He has received the Rajiv Gandhi Khel Ratna award, India's highest sporting honour, in 1996-99; the Arjuna Award in 1990; the Padma Shri award in 2001 and its 3rd Highest Civilian Award the Padma Bhushan in January 2014 for his outstanding contribution to tennis in India.

Roger Federer wins the Australian Open men's singles title

29 January '18

Roger Federer won his career's 20th Grand Slam title by defeating Marin Cilic of Croatia in the title of the Australian Open. With this he became the first male player to win 20 Grand Slam titles.

20th Grand Slam title:

- ✗ It is the second consecutive and final Australian Open title of the Swiss player
- ✗ Roger Federer has now won a total of 20 grand slams, including 6 Australian Open titles.

Roger Federer:

- ✗ Roger Federer was born on August 08, 1981 in Basel City, Switzerland.
- ✗ Roger Federer's name came to the list of the world's top 100 tennis players for the first time in 1999.



Gurdeep Singh of RSPB won a gold medal in the +105kg category in the 70th men's Senior National Weightlifting Championships.

Prime Minister Narendra Modi declared the inaugural of first edition Khelo India School Games (KISG) open at the Indira Gandhi Indoor Stadium in New Delhi.

02 February '18



Khelo India School Games (KISG)

Key Facts

The first KISG were held under the Khelo India Programme to highlight India's young sporting talent and showcase India's sports potential. It was held across 16 disciplines in Under-17 age category. 5,000 school children from 29 states and seven union territories participated in mega sporting event held from January 31 to February 8, 2018. Total of 199 gold medals, 199 silver medals and 275 bronze medals were awarded at first KISG.

Khelo India Programme

The Khelo India programme was introduced by Ministry of Sports and Youth affairs to revive sports culture in India at grass-root level. Its objective is to build strong framework for all sports played in our country and establish India as great sporting nation. It is expected to help scout young talent from schools in various disciplines and groom them as future sports champions. Talented players will be identified under it in priority sports disciplines at various levels by High-Powered Committed and each will be provided annual financial assistance of Rs. 5 lakh for 8 years.

Mary Kom claimed gold medal in the India Open International Boxing tournament

03 February '18

The five-time World Champion and Olympic bronze medallist, Mary Kom claimed the gold medal in the India Open International Boxing tournament at Thyagraj Indoor Stadium in New Delhi.

Kom defeated Josie Gabuco from the Philippines in a split 4-1 decision to grab the gold in the women's 48kg weight category. The 12th seeded boxer had earlier booked her place in the finals after defeating Mongolian Altansetseg Lutsaikhan in the semi-final clash.



In the 64 kg category, the former world and Asian bronze medallist Pwllao Basumatary was the first among the women to fetch gold by claiming a 3-2 win over Thailand's Sudaporn Seesondee. Pinki Rani also fetched gold for India after defeating Mongolia's Jargalan Ochirbat in the final of fly (48-51 kg) category.

In other categories, Lovlina Borgohain defeated Pooja to claim the welterweight gold, while L Sarita Devi had to settle for silver after she lost to Finland's Olympic bronze-medallist Mira Potkenon in the 60 kg category. The Indian men boxers, on the other hand, were denied a complete sweep by traditional powerhouses of Cuba and Uzbekistan on the final day of the India Open Boxing Tournament.

05 February '18

India won Under-19 ICC World Cup 2018

India has won Under-19 ICC World Cup 2018 by defeating Australia by eight wickets. With this victory, India became first nation to win Under-19 World Cup four times. It was India's sixth appearance in the under-19 World Cup finals. Australia had made into the final five times, winning the tournament three times.



Key Facts

The 2018 final match was played at Bay Oval, Mount Maunganui, New Zealand. Australia, choosing to bat first after winning the toss had set target of 216 runs (10 wickets) in 47.2 overs. India in the chase, scored 220-2 in the 39th over. India's opener Manjot Kalra who scored 101 runs from 102 balls became second player in history to score century in ICC U-19 World Cup final, after Unmukt Chand. Indian team was led by Prithvi Shaw and was coached by former batsman Rahul Dravid.

ICC Under-19 Cricket World Cup

It is an international cricket tournament organised by International Cricket Council (ICC) and contested by national under-19 teams. It was first contested in 1988 as the Youth World Cup and later was not staged again until 1998. Since then, it is held as biennial event by the ICC. Previous winners: Australia (1988), England (1998), India (2000), Australia (2002), Pakistan (2004), Pakistan (2006), India (2008), Australia (2010), India (2012), South Africa (2014) and West Indies (2016).

13 February '18

India's Saurav Ghosal beat Nicolas Mueller to clinch Indian Open squash title

12 February '18



National champion and top seed Saurav Ghosal defeated number 2 seed Nicolas Mueller to win the Vedanta India Open Squash tournament title.

Ghosal, ranked 14th, won 3-2 after a no-holds-barred, 67-minute final against the much taller Swiss ranked 33rd in the world for his second crown at home in four months on the Professional Squash Association tour.

Ghosal won 11-9 5-11 6-11 11-7 12-10, after bouncing back from 3-7 and 5-8 by reeling off five straight points to hold championship points at 10-8.

Smith wins Australia's Border Medal

Australia cricket captain Steve Smith capped off a golden 12 months by winning his second Allan Border Medal in Melbourne.

Smith, hailed as the country's finest batsman since Donald Bradman, polled 246 votes, well ahead of two-time medal winner David Warner (162 votes) and Nathan Lyon (156 votes).



Smith, who had earlier been named Australia's Test Player of the Year for his dominant 12 months with the bat, won his first Border Medal in 2015.

The skipper was the hot favourite to take the award following a year in which he played 24 international games across limited overs and Test cricket and scored 1754 runs at 67.46 with seven centuries.

He captained a hard-fought series loss in India, a drawn series in Bangladesh and a triumphant 4-0 Ashes victory over England at home in which he was also named man of the series.

Smith, 28, is also the reigning ICC Test Cricketer of the Year after earning that accolade last month.

All-rounder Ellyse Perry won the Belinda Clark Award for a second time, confirming her as Australia's best female cricketer over the past 12 months.

15 February '18

Tamil Nadu win maiden senior national football championship

Tamil Nadu beat Manipur 2-1 to lift their maiden title in the 23rd edition of the Senior Women's National Football Championship. Tamil Nadu created history by becoming champions in their first-ever final with Indumathi scoring the opener in the 3rd minute while Indrani made it 2-0 in the 40th.

Ratanbala scored the lone goal for Manipur in the 57th.

Indumathi was also adjudged the Player of the Final as well as the Tournament for her superlative performances.



FIFA Rankings: Germany Retain Top Spot

16 February '18

World champions Germany has retained its top spot in the latest FIFA rankings. India is placed at 102 rank in this ranking.

Iceland, which has participated in the 2018 FIFA World Cup, has gained 18 places in the world rankings.



NEWS BITES | SPORTS

Kohli first to score 500 runs in bilateral ODI series 17 February '18



Indian captain Virat Kohli broke yet another record when he became the first ever batsman to amass 500 runs in a bilateral ODI series, surpassing teammate Rohit Sharma.

Kohli achieved the stellar feat in the sixth and final ODI against South Africa. He smashed three hundreds in the series, including in the final ODI, to lead from the front.

Sharma had collected 491 runs in the six-match home series against Australia in 2013-14.

17 February '18

Tendulkar made T20 Mumbai League's brand ambassador



Sachin Tendulkar has been made the brand ambassador of the upcoming T20 Mumbai League and he feels the league will provide a fine platform for the talented cricketers of the megapolis.

"It's always a pleasure to be associated with the Mumbai Cricket Association. The T20 Mumbai League will not only entertain cricket fans, but also provide a great platform to the talented young cricketers in Mumbai, Tendulkar was quoted of saying in a media release.

The league, scheduled from March 11 to 28 is to be organised by Sports India Pvt Ltd.



17 February '18

Former India captain Mahendra Singh Dhoni became India's first and world's third wicketkeeper to take 600 catches in international cricket.

Dhoni achieved the feat by taking the catch of Hashim Amla off pacer Shardul Thakur's bowling during the sixth India-South Africa ODI.

Former cricketer Mark Boucher (952) is first and Adam Gilchrist (813) is second in this regard.

Dhoni has taken 256 catches in Tests, 297 in ODIs and 47 in T20Is as a wicketkeeper so far.

Burning Topics of the Month

Rotavac - first Indigenously developed vaccine from India to be pre-qualified by WHO

The 'Pelican Bird Festival-2018' was held in Atapaka Bird Sanctuary

Discovery of a small population of fishes in Tasmania

& Many More...

23 January '18

India ranked 177 in the Environmental Performance Index (EPI) – 2018



India has been ranked 177 among 180 countries in the Environmental Performance Index (EPI) – 2018. This index has been developed by Yale University and Columbia University in collaboration with the World Economic Forum and the Joint Research Centre of the European Commission. This report has been released on the sidelines of World Economic Forum meet in Davos.

About the Index

Environmental Performance Index (EPI) is calculated on the basis of data gathered from 24 individual metrics of environmental performance. These 24 individual metrics are then aggregated into a hierarchy that begins with 10 major environmental issues categories.

1. Air Quality (household solid fuels and PM2.5 exposure)
2. Water & Sanitation
3. Heavy Metals (lead exposure)
4. Biodiversity & Habitat

5. Forests (tree cover loss)
6. Fisheries
7. Climate & Energy (CO₂, Methane and Black Carbon Emissions)
8. Air Pollution (SO₂ and NO_x emission)
9. Water resources (wastewater treatment)
10. Agriculture

Top Five Countries in 2018 EPI
Switzerland, France, Denmark, Malta and Sweden

Four new schemes to promote young scientists

25 January '18

The Ministry of Science & Technology has announced four new schemes to promote young scientists and researchers in the country. The schemes primarily aim at early recognition and reward to young talent in the field of science. They focus on youth to empower, recognize and motivate them.

TARE Scheme

It aims to tap latent potential of faculty working in state universities, colleges and private academic institutions who are well trained but having difficulty in pursuing their research due to varied reasons including lack of facilities, funding and guidance.

Overseas Visiting Doctoral Fellowship

It will offer opportunities for up to 100 PhD students admitted in Indian institutions for gaining exposure and training in overseas universities /institutions of repute and areas of importance to country for 1 year period during their doctoral research. The selected fellows will be paid a monthly fellowship amount, one-time contingency/

preparatory allowances to cover visa fee, airport transfer charges, medical insurance etc.

Distinguished Investigator Award (DIA)

The scheme was initiated to recognize and reward Principal Investigators (PIs) of Department of Science and Technology (DST) projects that have performed remarkably well.

AWSAR (Augmenting Writing Skills for Articulating Research) Scheme

The scheme aims to encourage, empower and endow popular science writing through newspapers, magazines, blogs, social media, etc. by young PhD Scholars and Post-Doctoral Fellows during course of their studies and research pursuits.



Tai Tzu Ying of Chinese Taipei defeated Saina Nehwal to win the women's singles title of Indonesia Masters.

26 January '18

Successfully cloned two identical long-tailed macaques (monkeys)

Chinese scientists for first time have successfully cloned two identical long-tailed macaques (monkeys), named Zhong Zhong and Hua Hua using same technique that produced Dolly sheep two decades ago. This development makes them world's first primates – the order of mammals that includes monkeys, apes and humans – to be cloned from non-embryonic cell.

Key Facts

These two identical long-tailed macaques were cloned using process called somatic cell nuclear transfer (SCNT), which involves transferring the nucleus of cell, which includes its DNA, into egg whose nucleus is removed. Since cloned Dolly sheep was born in Scotland in 1996 using SCNT, scientists have successfully used this technique to clone more than 20 other species, including cows, pigs, dogs, rabbits, rats and mice. Similar work in primates earlier, had always failed, leading some scientists to wonder if primates were resistant. Chinese Scientists were successful to clone macaques using modulators to switch on or off certain genes that were inhibiting embryo development. Their technique worked only when nuclei were transferred from foetal cells, rather than adult ones, as was the case with Dolly. In all, it took 127 eggs to produce two live macaque births.



Significance

Genetically identical animals are useful in research because confounding factors caused by genetic variability in non-cloned animals can complicate experiments. This development breaks technical barrier for the cloning of primate species, including humans. It will make possible to study diseases in populations of genetically uniform monkey and test new drugs for a range of diseases before clinical use.

Rotavac - first Indigenously developed vaccine from India to be pre-qualified by World Health Organisation (WHO)

28 January '18

Rotavac became first Indigenously developed vaccine from India to be pre-qualified by World Health Organisation (WHO). It means that vaccine can be sold internationally to several countries in South America and Africa. So far, several vaccines from India have been pre-qualified by WHO, but Rotavac is first vaccine entirely developed locally to get this status in safety and efficacy.

Rotavac

Rotavac conceived and developed by the Hyderabad-based Bharat Biotech Limited. It protects against childhood diarrhoea caused by the rotavirus. It was developed under the joint collaboration between India and United States in area of medical research. It was developed under public-private partnership (PPP) model that involved Ministry of Science and Technology, institutions of the US Government and NGOs in India supported by Bill and Melinda Gates Foundation. The vaccine was built on strain of the virus isolated at the All India Institute of Medical Sciences (AIIMS), New Delhi over 30 years ago. It has been included in India's national

immunisation programme. The vaccine was tested in field for over a year, have not shown any negative effect.

Significance

This recognition signifies credible industrial, scientific and regulatory process in place to develop vaccines in India. It paves the way for health and humanitarian organizations such as UNICEF, GAVI and Pan-American Health Organization to procure Rotavac for public health vaccination programmes across the world.

Rotavirus

It is a most common causative agent of moderate-to-severe diarrhoea (MSD) among infants below 11 months age group in India. It spreads from person to person due to bacterial and parasiting agents that are primarily transmitted through contaminated food or water. It is responsible for estimated 36% of hospitalisations for childhood diarrhoea around world and for estimated 200,000 deaths in low- and middle-income countries. In India, diarrhoea caused by rotavirus, kills nearly 80 thousand children under age of 5 years and up to 10 lakh hospitalizations each year.

29 January '18

Discovery of a small population of fishes in Tasmania

A group of scientists have found a small population of fish that walk along the seabed off Australia's south coast in Tasmania. The fish species, the Red Handfish (*Thymichthys politus*) is only found in south-eastern Tasmania, an isolated island state, which is one of the few places on the planet that is home to rare and unique endangered species.

Key Highlights of the Discovery

- ✎ Till last week only about 20 to 40 of them were identified in Tasmania's Frederick Henry Bay.
- ✎ The new group also comprising 20 to 40 fishes inhabits a small area whose location the researchers decided not to disclose until the conservation plan for the area was discussed.



Green Good Deeds campaign

05 February '18

The Union Ministry of Environment, Forests and Climate Change (MoEFCC) has launched Green Good Deeds campaign. It was launched by Environment Minister Dr Harsh Vardhan in New Delhi.

The purpose of the people-oriented campaign is to sensitise people and students, in particular about climate change and global warming.

Key Facts

Environment Minister has asked teaching community to join a campaign to sensitise all about climate change and global warming, which he termed was matter of concern for the world. He also underlined need for 'Green Sainiks' on the lines of 'Polio Sainiks' to broaden the 'Green Good Deeds' campaign and take it to the grassroots level. The campaign aims to broad its base with involvement of teachers, students and other voluntary organisations.



Pelican Bird Festival-2018

06 February '18

The 'Pelican Bird Festival-2018' was held for the first time in Atapaka Bird Sanctuary on at Kolleru lake in Andhra Pradesh. It was jointly organised by Andhra Pradesh Tourism Authority (APTA) and Krishna district administration.

Background

During winter season, thousands of pelicans, painted storks and other birds migrate to Kolleru lake. During their stay they roost, breed and later fly away with their off springs. Recently, Atapaka Bird Sanctuary was recognised as one of the largest pelicanry in the world.

Kolleru lake

Kolleru Lake is one of the largest freshwater lakes in India located in Andhra Pradesh. It is located between Krishna and Godavari deltas. It spans into two districts of Andhra Pradesh- Krishna and West Godavari. wildlife sanctuary in November 1999 under Wildlife Protection Act international importance in November 2002 under Ramsar Convention.

It is important habitat for resident and migratory birds, including the grey or spot-billed pelican (*Pelecanus philippensis*). Many birds migrate here in winter, such as Siberian crane, ibis, and painted storks.



It was declared as of 1972, and designated wetland of

Agni-1 was successfully test-fired

09 February '18

Indigenously developed short-range nuclear capable ballistic Agni-1 was successfully test-fired from mobile launcher located at Integrated Test Range of Dr Abdul Kalam Island (Wheeler Island) off the Odisha. The missile was tested as part of a periodic training activity by the Strategic Forces Command (SFC) of the Indian Army to consolidate operational readiness. It is claimed to be part of India's minimum credible deterrence under No first to use policy.

Agni-1 Missile

Agni-1 is indigenously developed intermediate range surface-to-surface, single-stage missile. It was developed by Advanced Systems Laboratory (ASL) in collaboration with Defence Research Development Laboratory (DRDL) and Research Centre Imarat (RCI). ASL is the premier missile development laboratory of DRDO.

The missile weighs around 12 tonnes and is propelled by a solid rocket propellant system. It is 15-metre-long and can carry both conventional as well as nuclear payloads (warheads) up to 1,000 kg. It has strike range of over 700 km. It is equipped with specialised navigation system that ensures it reaches target with high degree of precision.

The missile already has been inducted into the armed forces (service) in 2004. It has proved its performance in terms of range, accuracy and lethality. The last trial of missile was successfully conducted in November 2016 from the same base.



The Botanical Survey of India (BSI) and Natural History Museum (NHM) of United Kingdom signed MoU

18 February '18

The Botanical Survey of India (BSI) and Natural History Museum (NHM) of United Kingdom signed a Memorandum of Understanding (MoU) in New Delhi to enhance cooperation in the field of genetic/taxonomic studies, research and training and conservation in India, including species and habitat conservation assessments.

The MoU was signed by BSI Director Dr. Paramjit Singh and Head of the Algae, Fungi and Plants Division, NHM, Dr. Sandra Knapp, in the presence of Union Environment Minister Dr. Harsh Vardhan.

Objective

The main objective behind signing the agreement is to open up mediums of collaboration in science, support further research and boost scientific study for the benefit of both India and UK.

The agreement will also help both the nations keep up with their commitment to use scientific evidence to support the goals of the Convention on Biological Diversity, CITES and the Nagoya Protocol.

Besides this, the MoU will centre on capacity building and scientific exchanges between the two nations and will enable both to learn from each other and work collaboratively to address important scientific questions and deliver benefit to humanity.

Significance

The agreement will pave the way for the BSI staff to work in London's Natural History Museum and for the staff there to work in Botanical Survey of India.

It will also enable the exchange of knowledge and information between the two esteemed research organisations.



Burning Topics of the Month

Mehul Garg became youngest applicant to achieve highest score in Mensa IQ test

Google and NCERT signed pact on Digital Citizenship and Safety

Mumbai is 12th richest city in world

& Many More...

India was ranked 81st among 118 countries in 2017 Global index of talent competitiveness (GTI) list. India has improved its position from 92nd last year. The index measures ability of countries to compete for talent i.e. how countries grow, attract and retain talent. It is produced by global business school INSEAD in partnership with Adecco Group and Tata Communications.

India ranked 81st in 2017 Global index of talent competitiveness (GTI) list

23 January '18

Key Facts

Top Countries: Switzerland is followed by Singapore and US. European countries dominate top ranks, with 15 out of the top 25 places. Developed, high-income countries are still the global talent champions while Zurich, Stockholm and Oslo take the top spots in the GTI cities' ranking.



BRICS countries: India's ranking was last among the five BRICS countries in 2017. China has moved up to 43rd now, Russia to 53rd, South Africa to 63rd and Brazil to 73rd position.

India faces serious risk of worsening brain drain. In terms of formal Education, India ranks 67th and in Lifelong Learning it ranks 37th. In terms of pool of Global Knowledge Skills (63rd) is solid compared with other emerging markets. India also has plenty of room for improvement in minimising brain drain while achieving brain gain by luring back some of its talented diaspora members as it ranks 98th in the Attract pillar and in retaining its own talent it ranks 99th.

India ranked 3rd on Leadership in Energy and Environmental Design (LEED) certified buildings.

26 January '18

India has been ranked 3rd on the annual ranking of the top 10 countries for Leadership in Energy and Environmental Design (LEED) certified buildings. India ranks third on the US Green Building Council's (USGBC) annual ranking of the top 10 countries for Leadership in Energy and Environmental Design (LEED) certified buildings. According to the survey by USGBC, the top 10 list highlights countries outside of the US that are using LEED and India, with more than 752 LEED-certified projects totalling over 20.28 million gross square meters of space, ranks third. "Around the world leaders are committing to climate change initiatives that have the power to improve quality of life for citizens and ensure a sustainable future," USGBC and Green Business Certification (GBCI) President and CEO Mahesh Ramanujam.

The list ranks countries and regions in terms of cumulative LEED-certified gross square metres as of December 31, 2017 and represents 6,657 certified projects totalling more than 158 million gross sq mt.

The top 10 list is led by China with a total of 1,211 LEED certified and registered projects for more than 47.16 million gross sq mt of space followed by Canada with 2,970 such projects with a total space of 40.77 million gross sq mt.

The other countries include Brazil, Germany, Korea, Taiwan, Turkey, Mexico and the UAE.

In comparison, the US, which is not included in the list, has 30,669 LEED certified projects totalling 385.65 million gross sq mt.

Economic Survey has estimated that the Indian economy will grow by 7-7.5 per cent in 2018-19.

APRIL 2018 | MICA 53

NEWS BITES | MISCELLANEOUS

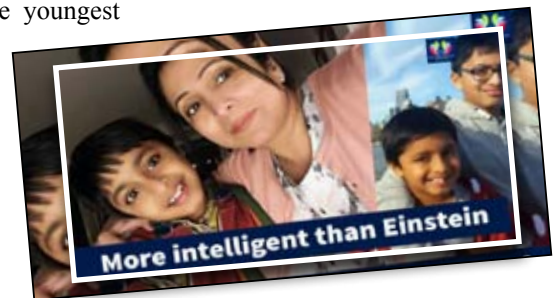
Mehul Garg became youngest applicant to achieve highest score in Mensa IQ test

28 January '18

Indian-origin boy Mehul Garg (10) in United Kingdom became youngest applicant in decade to achieve highest score in Mensa IQ test, beating geniuses like Albert Einstein and Stephen Hawking. He scored maximum score of 162 to become a member of Mensa. His score is two points higher than Einstein and Hawking. Mehul Garg is from Reading Boys Grammar School in Reading, southern England. He can solve Rubik's Cube in 100 seconds. He has been shortlisted for 'Child Genius 2018' show on Channel 4.

Mensa IQ test

Mensa is the largest and oldest high IQ society in the world. It is non-profit organization open to people who score at 98th percentile or higher on standardized, supervised IQ or other approved intelligence test. Its mission is to identify and foster human intelligence for benefit of humanity, encourage research into nature, characteristics, and uses of intelligence and provide stimulating intellectual and social environment for its members. It was established in October 1946 and is headquartered in Lincolnshire, England. So far it has 134000 members.



31 January '18

Oxford's Hindi Word of the Year: aadhaar

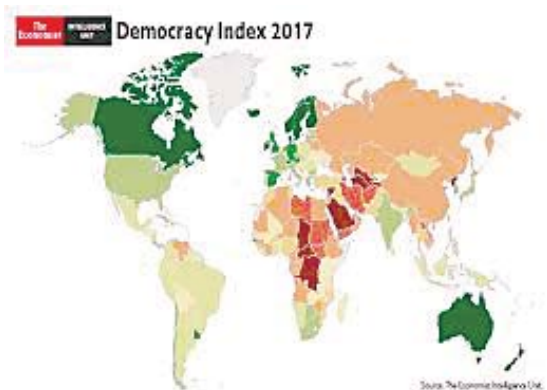


Oxford Dictionaries has chosen its first ever Hindi Word of the Year: aadhaar. Aadhaar is far from being a new word – in fact, its origins can be traced back to Sanskrit. In modern Hindi, aadhaar means 'base' or 'foundation', but the decision to use this word as the name of India's new identification initiative put it at the centre of a great social and political debate in India that also attracted the attention of the rest of the world in 2017. Aadhaar is a 12-digit identification number assigned to all residents of India. Translated into figures, that is almost 1.2 billion enrolled individuals as of the end of 2017, representing over 99% of Indians above the age of 18, each with a unique code linked to their biometric and demographic data. The Indian government's aim for the introduction of Aadhaar is to eliminate duplicate and fake identities, and to facilitate the delivery of social benefits and services to Indian citizens.

Global Democracy Index (GDI)

02 February '18

India world's largest democracy was ranked 42nd among 165 independent states on annual 2017 Global Democracy Index (GDI) released by UK-based company, Economist Intelligence Unit (EIU). India's rank has slipped from 32nd in 2016 GDI and its overall score dropped 0.58 points from 7.81 to 7.23. Moreover, India was classified India as a flawed democracy in 2017 GDI



About Global Democracy Index (GDI)

The index ranks 165 independent states and 2 territories on basis of 60 indicators grouped in five different categories viz. electoral process and pluralism, civil liberties, the functioning of government, political participation and political culture. It categories countries into four broad categories viz. full democracy, flawed democracy, hybrid regime and authoritarian regime based on their score on a scale from 0 to 10.

Highlights of GDI

Top 10 countries in 2017 GDI: Norway, Iceland, Sweden, New Zealand, Denmark, Ireland, Canada, Australia, Finland and Switzerland.

Global Scenario: US (ranked 21), Japan, Italy, France, Israel, Singapore, and Hong Kong were named among 'flawed democracies'. The hybrid regimes classified by it includes India's neighbours Pakistan (110th), Bangladesh (92nd), Nepal (94th) and Bhutan (99th). Those named as 'authoritarian regimes' include China (139th), Myanmar (120th), Russia (135th) and Vietnam (140th). North Korea was ranked lowest at 167th and Syria second last at 166th place.

7th India Energy Congress (IEC) 2018

02 February '18



The 7th India Energy Congress (IEC) 2018 was held in New Delhi. The theme for this edition of conference was Energy 4.0: Energy Transition Towards 2030. It was organised by World Energy Council India (WEC India) and inaugurated by Union Power and New and Renewable Energy Minister R K Singh.

Key Facts

IEC is the flagship event of WEC India and joint event of Ministries of Power, Coal, New & Renewable Energy, Petroleum & Natural Gas, External Affairs and Department of Atomic Energy. Over 400 experts participated in the Congress. They also discussed and debated on five sub-themes: Energy Investments in Uncertain World; Policy and Energy Environment 2030; Sustainable Mobility; Variable Renewable Energy Integration; and Reaching Last Mile.

World University Rankings for educational institutes in Asia

07 February '18

Only two Indian institutes have featured in the top 50 Asian institutes in recently released TIMES Higher Education (THE) World University Rankings for educational institutes in Asia. The two institutes that have made their way to top 50 are Indian Institute of Science (29th rank) and Indian Institute of Technology, Bombay (44).

Highlights of Rankings

Other institutes that have made their way to top 100 are IIT Kharagpur, IIT Roorkee, IIT Kanpur, and IIT Delhi. The ranks as released by the World University Ranking are: Indian Institute of Science (rank 29), IIT Bombay (44), IIT Kharagpur (60), IIT Roorkee (65), IIT Kanpur (81) and IIT Delhi (86). Other Indian institutes that have made it to top 200 are Tezpur University (100), IIT Madras (103), IIT Guwahati (112), Panjab University (114), National Institute of Technology, Rourkela (126), Jadavpur University (127), Indian School of Mines (141), University of Delhi (144), Aligarh Muslim University (158), Savitribai Phule Pune University (188) and IIT-BHU (194). Total of 17 institutes from India have made their way to top 200 Asian Universities in comparison to last year. Though representation of India has increased in list, several of the universities have fallen down the rankings. Both IISc and IIT Bombay have dropped two places each to 29 and 44 position respectively. IIT Madras has witnessed biggest decline this year and has fallen from last year's 41 place to 103 this year.

08 February '18

Google and NCERT signed pact on Digital Citizenship and Safety

Google and National Council of Educational Research and Training (NCERT) has signed a pact to integrate a course on 'Digital Citizenship and Safety' in information and communication technology (ICT) curriculum.

The pact was signed on 'Safer Internet Day' (February 6). The course aims to bring awareness amongst the young generation of India to make Internet a Safe space.

Key Facts

The Digital Citizenship and Safety course by Google India aims to bring social, ethical and legal aspects of internet safety and usage via structured in-class lessons. The complete course is divided into four categories (themes) viz Being Smart, Being Safe, Being a Digital Citizen and Being Future Ready.

The course aims to grow gradually with internet usage of children from elementary classes to senior secondary. The modules (categories) of the course are made to engage kids and match pace with their intellectual and inquisitive nature.

The basic modules of the course aim to make the children aware of Internet Safety, advanced topics like Privacy, Device Management, Intellectual Property (IP) and Reputation Management are added included as children grow, gradually moving towards Online Financial Literacy and Cyber Crime to shape them as Digital Citizens.

In addition, Google has also created curriculum for teachers so that they can help students learn all about digital citizenship in their classrooms.



Intellectual Property (IP) Index 10 February '18



India was ranked 44th out of 50 countries in the Intellectual Property (IP) Index released by US Chamber of Commerce. Last year, India was ranked 43rd out of 45 countries in index, with an overall score of 8.4 points. The index was released as part of annual report prepared by the Global Innovation Policy Center (GIPC) of the US Chambers of Commerce. The report analyses IP climate in 50 world economies based on 40 unique indicators that benchmark activity critical to innovation development surrounding patent, copyright, trademark and trade secrets protection.

Key Highlights of report

The US topped this edition of list with total 37.98 points, followed by United Kingdom (37.97) and Sweden (37.03). India has increased substantially its score this year. Its overall score has increased substantially from 25% (8.75 out of 35) in previous year to 30% (12.03 out of 40) in latest edition.

Despite improvement in score, India continues to remain towards bottom of ladder. India has demonstrated long-standing and clear commitment to increasing awareness of importance of IP rights and respect for creators and innovators. However, India has long way to go.

India's ranking reflects relatively strong performance in new indicators as well as positive reform efforts on patentability of computer-implemented inventions (CIIs) and registration procedures for well-known marks. 'Guidelines on the Examination of Computer-Related Inventions' issued by India in July 2017 has significantly improved patentability environment for technological innovations.

Mumbai is 12th richest city in world 12 February '18

India's financial capital Mumbai, with a total wealth of \$950 billion, is among the top 15 wealthiest cities globally, while New York tops the list, says a report.

According to a report by New World Wealth, the economic hub of India is the 12th wealthiest city, followed by Toronto with a total wealth of \$944 billion, Frankfurt (\$912 billion) and Paris (\$860 billion).

Total wealth refers to the private wealth held by all the individuals living in each city. Government funds are excluded from the figures. Mumbai also features among the top 10 cities in terms of billionaire population. The city is home to 28 billionaires.

Regarding Mumbai, the report said, "Total wealth held in the city amounts to \$950 billion. Mumbai is the economic hub of India. It is also home to the Bombay Stock Exchange, the 12th largest stock exchange in the world. Major industries in the city include financial services, real estate and media."

London ranked second in the list, followed by Tokyo, and San Francisco Bay area. Others in the list include Beijing, Shanghai, Los Angeles, Hong Kong, Sydney, Singapore and Chicago. Among the 15 cities listed, San Francisco, Beijing, Shanghai, Mumbai and Sydney were the fastest growing in terms of wealth growth over the past 10 years.



India's defence budget breaks into world's top 5: UK report 15 February '18

India's defence budget broke into the world's top five, beating the UK for the first time, a new report by a London-based global think-tank said.

India overtook the UK as the fifth-largest defence spender in the world in 2017 at USD 52.5 billion, up from USD 51.1 billion in 2016, according to the 'Military Balance 2018' report by the International

Institute for Strategic Studies (IISS). In contrast, the UK's defence budget fell from USD 52.5 billion in 2016 to USD 50.7 billion last year.

The report notes that while India continues to modernise its military capabilities, China with the world's second-largest defence budget after the US remains far ahead with three times India's defence budget at USD 150.5 billion.

China's real defence spending increased by nearly 25 per cent in 2016-17, whereas India's rose by just 2.4 per cent.



अब हर बेरोज़गार का सपना यहाँ होगा अपना

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OUR PRESENCE | BRANCH MOBILE NO.

Branch Name	Phone Number
Agra	9235253430/ 9236455136
Ahmedabad	9227575027
Ajmer	9261503888
Aligarh	7706008037
Allahabad	9235253403
Alwar	9521177944
Ambala	9253058711 /7206424816
Ambikapur	8823868882
Amritsar	9646606160
Asansol	7076880723
Azamgarh	9208242842
Budaun	9627671787
Bahraich	9208249852
Balasore	9583185223
Ballia	9208243152
Banda	9554334847
Bangalore	9538712808
Bareilly	9235253431
Basti	7706008031
Berhampur	9078907945
Bhagalpur	9204363221
Bhilai-Durg	8878783345
Bhopal-MP Nagar	9229174901
Bhopal-Lalghati	9229174902
Bhubaneswar	9237026745/ 9237081352
Bijnor	7706008027
Bilaspur	8878817515
Bulandshahr	7706008030
Chandigarh	9256002024
Chennai	8939777224
Coimbatore	8110967668
Cuttack	7894013095
Darbhangha	9204303818/ 9204300620
Dehradun	9236510116
Delhi Janakpuri	9212069515
Delhi Kingsway	9268561517
Delhi Laxmi Nagar	9268209355 /9268693952
Delhi Munirka	9210092245
Delhi Rohini	9250239671/9250239674

Deoria	9208248122
Dhanbad	9204979723/24
Durgapur	7076856390
Ernakulam	9645415987
Etah	9208237386
Faizabad	9235253421
Faridabad	9643396140
Farrukhabad	7706008029
Fatehpur	9554330811
Firozabad	9208235736
Gaya	9204311416
Ghaziabad	9212229752/24
Ghaziipur	9208244539
Gonda	9208250778
Gorakhpur	9235253400/ 9208205892
Gurugram	9643396139
Guwahati	8134935078
Gwalior	9229174910
Haldwani	9208256021
Hardoi	9208248208
Haridwar	7706008034
Hisar	9253678050
Hoshangabad	8358831338
Hyderabad-Ameerpet	9247749865 /8790034792
Hyderabad- Dilsukh Nagar	7032410704
Indore- Sapna Sangeeta Road	7581800952
Jabalpur	9229174905
Jaipur	9261601713/ 9261518894
Jammu	9419305561
Jamshedpur	8877187640
Jaunpur	9208244355
Jhalandhar	8557088164
Jhansi	9235253424
Jodhpur	9636512855
Kanpur Kakadev	9235253484
Kanpur Kidwainagar	9235253482
Kanpur Mall Road	9236757143/ 9236720133
Karnal	8930175568
Kolkata	9230141497/8017652045

BRANCH MOBILE NO. | OUR PRESENCE

Kurukshetra	9253678053
Lakhimpur	9208251562
Lucknow Alambagh PO	9235253521
Lucknow Alambagh SSC	9235253438/66
Lucknow Bhootnath	9235253528
Lucknow Gomti Nagar	9235253548
Lucknow Mahanagar PO	9235253443
Lucknow Rajajipuram	9235253425
Ludhiana	9256002028
Mainpuri	9208241450
Mathura	9208235067
Meerut	9235253448
Mirzapur	9208243884
Moradabad	9235253442
Mumbai	9221944071
Muzaffarnagar	7706008032
Muzaffarpur	9204303515/ 9204355614
Nagpur Gandhinagar	9272273686/9272295576
Nagpur-Buldi	9168558073
Nasik	9168512624/ 9168511626
Noida	9953948834
Orai	9208237457
Patiala	9780859721
Patna Boaring Road	9204855301/02
Patna Fraizer Road	9204855305/06/09/11

Pilibhit	9837186684
Pratapgarh	9208245660
Pune	9225231629
Raebareilly	9235253412
Raipur	9229174912/ 9200193438
Rajkot	9979316870
Rampur	9208255388
Ranchi	9204855313
Rewa	7415690904
Rohtak	8930403886
Roorkee	7706008033
Sagar	7509219781
Saharanpur	9235253445
Sambalpur	8594958962/ 8594959148
Shahjahanpur	9208256201
Shimla	8894100342
Siliguri	7602742939
Sitapur	7706008028/ 9235253514
Sultanpur	9208252915
Surat	9537360459
Tirupati	9581933099
Thiruvananthapuram	9645415029
Unnao	9208242493
Vadodara	9537589477
Varanasi	9235253419
Vijaywada	8886309897
Vishakapatnam	9966593419
Warangal	8142230661

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Acclaimed Ottanthullal artiste Kalamandalam Geethanandan died. He was 58.

APRIL 2018 | MICA

59

WHO'S WHO | DESIGNATION

WHO'S WHO		
S.No.	DESIGNATION	NAME
1.	Chairman, Rajya Sabha	Venkaiah Naidu
2.	Chairperson of Lok Sabha	Sumitra Mahajan
3.	Chairman of NITI Ayog	Narendra D Modi
4.	Leader of Opposition in Rajya Sabha	Gulam Nabi Azad
5.	Leader of House in Lok Sabha	Narendra D Modi
6.	Leader of Opposition in Lok Sabha	Mallikarjun Kharge
7.	Chief Election Commissioner	Om Prakash Rawat
8.	Election Commissioner	Ashok Lavasa, Sunil Arora
9.	Director General, ITBP	RK Pachnanda
10.	Chief Vigilance Commissioner	K V chaudhary
11.	Foreign Secretary	Vijay Keshav Gokhale
12.	Comptroller & Auditor General of India	Rajeev Mehrishi
13.	Chairman, National Commission for Backward Classes	Jus. Vangala Eswaraiah
14.	Chairman, Telecom Regulatory Authority of India	R. S Sharma
15.	CBI Director	Alok Kumar Verma
16.	Chairman, National Commission for Scheduled Tribes	Nand Kumar Sai
17.	Chairperson, National Commission for Minorities	Syed Ghayurul Hasan Rizvi
18.	Chairman, UPSC	David R. Syiemlieh
19.	Director General, National Investigation Agency	Y.C. Modi
20.	Chairman, UGC	D.P. Singh
21.	Chairman, Space Commission and ISRO	K. Sivan
22.	Chairman, Atomic Energy Commission and Sec. Deptt. of Atomic Energy	Sekhar Basu
23.	Chairman, SSC	Ashim Khurana
24.	Chairman, National Human Rights Commission	Justice H.L. Dattu
25.	Registrar General of India and Census Commissioner	Sailesh
26.	Chairman, Central Board of Direct Taxes	Sushil Chandra
27.	Chairman, Insurance Regulatory Development Authority of India	T.S. Vijayan
28.	Chairman, Securities & Exchange Board of India	Ajay Tyagi
29.	Chairperson, State Bank of India	Rajnish Kumar
30.	Chairman, LIC	V.K. Sharma
31.	India's permanent representative in UNO	Syed Akbaruddin
32.	Home Secretary	Rajiv Gauba
33.	Chairperson of National Commission for Women	Lalitha Kumaramanglam
34.	Chairman, 15th Finance Commission	N.K. Singh
35.	Chairman, Competition Commission of India	Devendra Kumar Sikri
36.	Chairperson, Central Board of Film Certification	Prasoon Joshi
37.	President, ASSOCHAM	Sandeep Jajodia
38.	Chairman, NASSCOM	Raman Roy
39.	New Chief of Army Staff	Bipin Rawat
40.	Director General, RAW	Anil Dhasmana
41.	Chairperson, Children Film Society of India	Mukesh Khanna
42.	Director, Bhabha Atomic Research Centre	Kamlesh Nilkanth Vyas
43.	President, CII	Shobana Kamineni
44.	President, FICCI	Rashesh Shah
45.	Chairman, National Knowledge Commission	Sam Pitroda
46.	National Security Advisor	Ajit Doval
47.	Chairperson, Prasara Bharati	Dr. A. Surya Prakash
48.	Chairman, Investment Commission	Ratan Tata
49.	Finance Secretary	Hasmukh Adhia
50.	Chairman, Indian Banks Association	Rajeev Rishi

Data as on 20th February, 2018

Online consumer spends to hit \$100 billion by 2020: Report

15 February '18

Online consumer spending is expected to grow 2.5 times to around USD 100 billion by 2020 led by growth in e-commerce, travel and hotel, financial services and digital media, says a report.

“Potential exists for digital transactions to triple from around USD 40 billion at present to USD 100 billion by 2020,” the report by the Boston Consulting Group in association with the search giant Google said.

E-commerce for products such as apparel and accessories, consumer electronics, durables, food and grocery, is likely to be the biggest constituent with the market size estimated to reach USD 40-45 billion by 2020, from around USD 18 billion at present.

Digital payments for travel and hotel is estimated to touch USD 20 billion by 2020 from USD 11 billion at present, financial services to reach to USD 30 billion from USD 12 billion at present, and digital media to reach USD 570 million from USD 200 million, according to the report.

Online users has grown nearly two times in four years to reach 430 million users at present, propelled by cheaper smartphones, cheaper data and more mobile-specific or local language content, it said.

The report found that women, new users from non-tier 1 cities and above 35 years shoppers will drive this growth.



Six Indian Americans win Gates Cambridge scholarship

15 February '18

Six Indian Americans, including two women, are among 35 students from the US selected for the prestigious Gates Cambridge scholarship. The six Indian Americans are Neil Davey, Ayan Mandal, Pranay Nadella and Vaithish Velazhahan. The two women selected for the scholarship are Kaamya Varagur and Monica Kullar.

Under a USD 210 million endowment from the Bill and Melinda Gates Foundation, the scholarship enable outstanding graduate students from all around the world to study at the University of Cambridge.

Names of the candidates from other countries would be announced in April. The aim of the program is to build a global network of future leaders committed to improving the lives of others.



42 Indian languages may be heading for extinction

20 February '18

More than 40 dialects or languages in India are considered to be dying out and they are believed to be heading towards extinction as only a few thousand people speak them. Earlier in 2013, comprehensive linguistic survey in India was done by People's Linguistic Survey of India (PLSI) which said that in India people speak 780 different languages. It also said that in the last 50 years, India lost nearly 250 languages. As per the government's census data, India has 1635 rationalised mother tongues, 22 major languages in the country and 234 identifiable mother tongues.

Languages or dialects which were considered endangered

The endangered list was prepared by UNESCO (United Nations Educational, Scientific and Cultural Organization) on the basis of number of people speak the language and other various parameter.

The languages or dialects which were considered endangered, include 11 from Andaman and Nicobar Islands (Great Andamanese, Jarawa, Lamongse, Luro, Muot, Onge, Pu, Sanenyo, Sentilese, Shompen and Takahanyilang), seven from Manipur (Aimol, Aka, Koiren, Lamgang, Langrong, Purum and Tarao) and four from Himachal Pradesh (Baghati, Handuri, Pangvali and Sirmaudi), three from Odisha (Manda, Parji and Pengo), two from Karnataka (Koraga and Kuruba), two from Andhra Pradesh (Gadaba and Naiki), two from Tamil Nadu (Kota and Toda), two from Arunachal Pradesh (Mra and Na), two from Assam (Tai Nora and Tai Rong), One from Uttarakhand (Bangani), one from Jharkhand (Birhor), one from Maharashtra (Nihali), one from Meghalaya (Ruga) and one from West Bengal (Toto).

WORLD OF ENGLISH | ETYMOLOGY

ANTAGONISE

PRONUNCIATION

æn¹ tæg .ə.naɪ z

Okay so let's deal with this one!

'AN' can be pronounced like 'an' from the word 'Animal' [æni m(ə)l], 'TAG' can be pronounced like 'tag' [tæg], 'O' this sound can be taken from 'fare' [feə(r)] and 'NISE' can be pronounced like 'wise' [waɪ z] so all together you have to pronounce it like 'an+tag+a+naiz'.

DEFINITIONS

To make someone dislike you or feel opposed to you; cause someone to become hostile.

Physiology- an opposing action, as by one muscle in relation to another.

Biochemistry, Pharmacology- the opposing action of substances, as drugs, that when taken together decrease the effectiveness of at least one of them (contrasted with synergism).

Ecology.

A relationship between two species of organisms in which the individuals of each species adversely affect the other, as in competition.

SYNONYMS : Alienate, estrange, disaffect

ANTONYMS : Pacify, placate, allay

EXAMPLES OF ANTAGONISE IN A SENTENCE

1. It is a very delicate situation and I have no wish to antagonise him.
2. The biggest drawback to this plan is that it will antagonise opponents of outsourcing.

RELATED FORMS : Antagonised, antagonising

EXAMPLES

1. His speech antagonised many voters.
2. Some people are antagonising the release of a movie.

FIRST KNOWN USE OF ANTAGONISE

18th century

C18: from Greek antagōnizesthai,

from 'ant- against' and 'agōnizesthai-struggle'

NEW AND TRICKY

SUFFIX -	DESCRIPTION	PARTS OF SPEECH	MADE FROM	EXAMPLES
-ise	Make into X	Verb	Adjective or noun	Advertise, polarise, improvise, pologise

OTHER PARTS OF SPEECH

antagonisable, adjective

antagonisation, noun

reantagonise, verb

unantagonisable, adjective

unantagonised, adjective

RELATED WORDS

Antagonism, noun

An active hostility or opposition, as between unfriendly or conflicting groups.

Antagonist, noun

A person who struggles against someone or something.

EXAMPLES IN A SENTENCE

1. William's plan to become an actor met with the antagonism of his family
2. The stakes of nuclear war engage not just the survival of the antagonists, but the fate of mankind.

OTHER RELATED EXAMPLES

1. If you antagonise the dog, it will bite you.
2. The man made a huge mistake when he decided to antagonise the bees in his yard.
3. The public seems to be going out of his way to antagonise politicians.
4. Since John was already irritated, his wife knew it would not take much to antagonise him.
5. The boy believes he will antagonise his religious father if he tells him he is bad.
6. They personally don't think we should be given more powers because it would just antagonise people.
7. He liked his neighbour and didn't want to antagonise him.
8. We didn't go out of our way to antagonise him, indeed we tried to avoid all contact.
9. Never antagonise anybody without knowing the reasons.
10. On the basis of his experience, he says that people generally antagonise the change.

TIME TO FINAL PREPARATION

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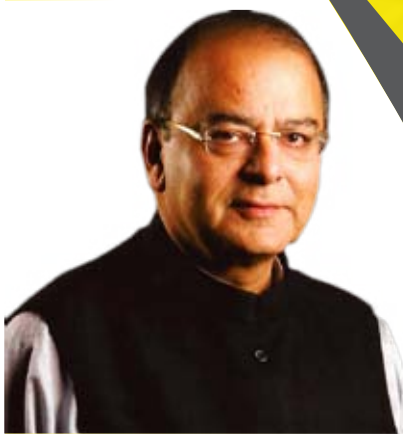
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RAILWAY



STATE LEVEL EXAM



ANNUAL BUDGET 2018-19

Summary of Budget 2018-19

Government says that it is firmly on course to achieve high growth of 8% plus as manufacturing, services and exports are back on good growth path. While GDP growth at 6.3% in the second quarter of 2017-18 signaled turnaround of the economy, growth in the second half is likely to remain between 7.2% to 7.5%. IMF, in its latest Update, has forecast that India will grow at 7.4% next year in the backdrop of services resuming high growth rates of 8% plus, exports expected to grow at 15% in 2017-18 and manufacturing back on good growth path.

The Government has taken up programmes to direct the benefits of structural changes and good growth to reach farmers, poor and other vulnerable sections of our society and to uplift the under-developed regions. This year's Budget consolidated these gains and particularly focus on strengthening agriculture and rural economy, provision of good health care to economically less privileged, taking care of senior citizens, infrastructure creation and working with the States to provide more resources for improving the quality of education in the country.



Agriculture and Rural Economy

MSP for all unannounced kharif crops will be one and half times of their production cost like majority of rabi crops: Institutional Farm Credit raised to 11 lakh crore in 2018-19 from 8.5 lakh crore in 2014-15.

Government has decided to keep MSP for all unannounced kharif crops atleast one and half times of their production cost after declaring the same for the majority of rabi crops. The volume of institutional credit for agriculture sector from year-to-year increased from Rs.8.5 lakh crore in 2014-15 to Rs.10 lakh crore in 2017-18 and he proposed to raise this to Rs.11 lakh crore for the year 2018-19.



After the establishment of Dairy Infrastructure Fund, a Fisheries and Aqua culture Infrastructure Development Fund (FAIDF) is announced for fisheries sector and an Animal Husbandry Infrastructure Development Fund (AHIDF) for financing infrastructure requirement of animal husbandry sector with a total corpus of Rs.10,000 crore for the two new funds.

“Operation Greens” launched to address price fluctuations in potato, tomato and onion for benefit of farmers and consumers.

On the lines of “Operation Flood” a new Scheme “Operation Greens” was announced with an outlay of Rs 500 Crore to address the challenge of price volatility of perishable commodities like tomato, onion and potato with the satisfaction of both the farmers and consumers.

It is also announced to develop and upgrade existing 22,000 rural haats into Gramin Agricultural Markets (GrAMs) to take care of the interests of more than 86% small and marginal farmers. These GrAMs, electronically linked to e-NAM and exempted from regulations of APMCs, will provide farmers facility to make direct sale to consumers and bulk purchasers. Moreover, an Agri-Market Infrastructure Fund with a corpus of Rs.2000 crore will be setup for developing and upgrading

agricultural marketing infrastructure in the 22000 Grameen Agricultural Markets (GrAMs) and 585APMCs. So far 470 APMCs have been connected to e-NAM network and rest will be connected by March, 2018.

Similarly, allocation of Ministry of Food Processing has been doubled from Rs.715 crore in 2017-18 to Rs.1400 crore in 2018-19.

Terming Bamboo as ‘Green Gold’, a Re-structured National Bamboo Mission with an outlay of Rs.1290 crore is announced to promote bamboo sector in a holistic manner.

Under Prime Minister Krishi Sinchai Yojna-Har Khet ko Pani, 96 deprived irrigation districts will be taken up with an allocation of Rs 2600 crore.

It is also proposed to extend the facility of Kisan Credit Cards to fisheries and animal husbandry farmers to help them meet their working capital needs.

India’s agri-exports potential is as high as US \$100 billion against current exports of US \$30 billion and to realize this potential, export of agri-commodities will be liberalized. It is also proposed to set up state-of-the-art testing facilities in all the forty two Mega Food Parks.

A special Scheme to support the efforts of the governments of Haryana, Punjab, Uttar Pradesh and the NCT of Delhi to address air pollution in the Delhi-NCR region by subsidizing machinery required for in-situ management of crop residue.



Loans to Women Self Help Groups will increase to Rs.75,000 crore in 2019 from 42,500 crore last year.

On the loans to Self Help Groups of women, it increased to about Rupees 42,500 crore in 2016-17, growing 37% over previous year and expressed confidence that loans to SHGs will increase to Rs.75,000 crore by March, 2019. Allocation of National Rural Livelihood Mission is increased to Rs 5750 crore in 2018-19.

Higher targets for Ujjwala, Saubhagya and Swachh Mission to cater to lower and middle class in providing free LPG connections, electricity and toilets.

Under Ujjwala Scheme distribution of free LPG connections will be given to 8 crore poor women instead of the previous target of 5 crore women. Under Saubhagya Yojana, 4 crore poor households are being provided with electricity connection with an outlay of Rs.16,000 crore. To fulfil target of housing for All by 2022, more than one crore houses will be built by 2019 in rural areas, besides already constructed 6 crore toilets under Swachh Bharat Mission. In the year 2018-19, for creation of livelihood and infrastructure in rural areas, total amount to be spent by the Ministries will be Rs.14.34 lakh crore, including extra-budgetary and non-budgetary resources of Rs.11.98 lakh crore. Apart from employment due to farming activities and self employment, this expenditure will create employment of 321 crore person days, 3.17 lakh kilometers of rural roads, 51 lakh new rural houses, 1.88 crore toilets, and provide 1.75 crore new household electric connections besides boosting agricultural growth.

Two Indian-Americans, Arogyaswami Paulraj and Sumita Mitra have been inducted into National Inventors Hall of Fame this year.

Outlay on health, education and social protection will be 1.38 lakh crore. Tribal students to get Ekalavya Residential School in each tribal block by 2022.

The estimated budgetary expenditure on health, education and social protection for 2018-19 is Rs.1.38 lakh crore against estimated expenditure of Rs.1.22 lakh crore in 2017-18.

Ekalavya Model Residential School on par with Navodaya Vidyalayas will set up to provide the best quality education to the tribal children in their own environment by 2022 in every block with more than 50% ST population and at least 20,000 tribal persons with special facilities for preserving local art and culture besides providing training in sports and skill development.

To step up investments in research and related infrastructure in premier educational institutions, including health institutions, a major initiative named “Revitalising Infrastructure and Systems in Education (RISE) by 2022” with a total investment of Rs.1,00,000 crore in next four years was announced. He said that a survey of more than 20 lakh children has been conducted to assess the status on the ground, which will help in devising a district-wise strategy for improving quality of education.

To improve the quality of teachers an integrated B.Ed. programme for teachers will be initiated. Government would launch the “Prime Minister’s Research Fellows (PMRF)” Scheme this year. Under this, 1,000 best B.Tech students will be identified each year from premier institutions and provide them facilities to do Ph.D in IITs and IISc, with a handsome fellowship. Allocation on National Social Assistance Programme this year has been kept at Rs. 9975 crore.

National Health Protection Scheme is announced to cover over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries)

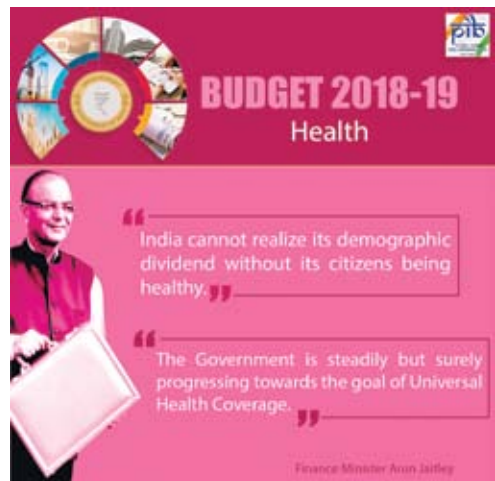
The world’s largest government funded health care programme titled National Health Protection Scheme is announced to cover over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries) providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization.

Also Rs 1200 crore is committed for the National Health Policy, 2017, which with 1.5 lakh Health and Wellness Centres will bring health care system closer to the homes of people. The Government also decided to allocate additional Rs.600 crore to provide nutritional support to all TB patients at the rate of Rs.500 per month for the duration of their treatment. The government will be setting up 24 new Government Medical Colleges and Hospitals by upgrading existing district hospitals in the country.

On cleaning the Ganga, a total of 187 projects have been sanctioned under the Namami Gange programme for infrastructure development, river surface cleaning, rural sanitation and other interventions at a cost of Rs.16,713 crore. 47 projects have been completed and remaining projects are at various stages of execution. All 4465 Ganga Grams – villages on the bank of river - have been declared open defecation free. The government has identified 115 aspirational districts taking various indices of development in consideration for making them model districts of development.

Medium, Small and Micro Enterprises (MSMEs) and Employment

Proposal to extend reduced rate of 25 percent currently available for companies with turnover of less than 50 crore (in Financial Year 2015-16), to companies reporting turnover up to Rs. 250 crore in Financial Year 2016-17, to benefit micro, small and medium enterprises.



The Budget has given a big thrust to Medium, Small and Micro Enterprises (MSMEs) to boost employment and economic growth. A sum of Rs. 3794 crore has been provided for giving credit support, capital and interest subsidy and for innovations. MUDRA Yojana launched in April, 2015 has led to sanction of Rs.4.6 lakh crore in credit from 10.38 crore MUDRA loans. 76% of loan accounts are of women and more than 50% belong to SCs, STs and OBCs. It is proposed to set a target of Rs.3 lakh crore for lending under MUDRA for 2018-19 after having successfully exceeded the targets in all previous years.

Employment Generation

Reiterating that creating job opportunities is at the core of Government policies, Finance Minister cited an independent study as showing that 70 lakh formal jobs will be created this year.

The Government will contribute 12% of the wages of the new employees in the EPF for all the sectors for next three years. It is also proposed to make amendments in the Employees Provident Fund and Miscellaneous Provisions Act, 1952 to reduce women employees' contribution to 8% for first three years of their employment against existing rate of 12% or 10% with no change in employers' contribution.

The Budget proposed an outlay of Rs.7148 crore for the textile sector in 2018-19 as against Rs.6,000 Crore in 2016.

Infrastructure and Financial Sector Development

Emphasising that infrastructure is the growth driver of economy, It is estimated that investment in excess of Rs.50 lakh crore is needed to increase growth of GDP and connect the nation with a network of roads, airports, railways, ports and inland waterways. He announced increase of budgetary allocation on infrastructure for 2018-19 to Rs.5.97 lakh crore against estimated expenditure of Rs.4.94 lakh crore in 2017-18.

The Government has made an all-time high allocation to rail and road sectors and is committed to further enhance public investment.

To further boost tourism, the Budget proposes to develop ten prominent tourist sites into Iconic Tourism destinations by following a holistic approach involving infrastructure and skill development, development of technology, attracting private investment, branding and marketing.

Under the Bharatmala Pariyojana, about 35000 kms road construction in Phase-I at an estimated cost of Rs.5,35,000 crore has been approved.

Railways

Capital Expenditure for 2018-19 : Rs.1,48,528 crore.

3600 kms of track renewal is targeted.

90 kilometers of double line tracks for Mumbai Local.

Railways Capital Expenditure for the year 2018-19 has been pegged at Rs.1,48,528 crore.

4000 kilometers of electrified railway network is slated for commissioning during 2017-18. Adequate number of rolling stock – 12000 wagons, 5160 coaches and approximately 700 locomotives are being procured during 2018-19. Over 3600 kms of track renewal is targeted during the current fiscal. Redevelopment of 600 major railway stations is being taken up.

Mumbai's local train network will have 90 kilometers of double line tracks at a cost of over Rs.11,000 crore. 150 kilometers of additional suburban network is being planned at a cost of over Rs.40,000 crore, including elevated corridors on some sections. A suburban network of approximately 160 kilometers at an estimated cost of Rs.17,000 crore is being planned to cater to the growth of the Bengaluru metropolis.



Air Transport

The Budget proposes to expand the airport capacity more than five times to handle a billion trips a year under a new initiative - NABH Nirman. Under the Regional connectivity scheme of UDAN (Ude Desh ka Aam Nagrik) initiated by the Government last year, 56 unserved airports and 31 unserved helipads would be connected.

Digital Economy

NITI Aayog will initiate a national program to direct efforts in artificial intelligence.



Department of Science & Technology will launch a Mission on Cyber Physical Systems to support establishment of centres of excellence for research, training and skilling in robotics, artificial intelligence, digital manufacturing, big data analysis, quantum communication and internet of things. The Budget doubled the allocation on Digital India programme to Rs 3073 crore in 2018-19.



To further Broadband access in villages, the Government proposes to set up five lakh wi-fi hotspots to provide net connectivity to five crore rural citizens. Rs. 10000 crore is allocated in 2018-19 for creation and augmentation of Telecom infrastructure.



Disinvestment

Disinvestment crossed target of Rs 72,500 crore to reach Rs 1,00,000 crore

The Finance Minister announced that 2017-18 disinvestment target of Rs.72,500 crore has been exceeded and expected receipts of Rs.1,00,000 crore. He set disinvestment target of Rs.80,000 crore for 2018-19.

Three Public Sector Insurance companies- National Insurance Co. Ltd., United India Assurance Co. Ltd., and Oriental India insurance Co. Ltd., will be merged into a single insurance entity.

The Finance Minister announced that a comprehensive Gold Policy will be formulated to develop gold as an asset class. The Government will also establish a system of consumer friendly and trade efficient system of regulated gold exchanges in the country. Gold Monetization Scheme will be revamped to enable people to open a hassle-free Gold Deposit Account.

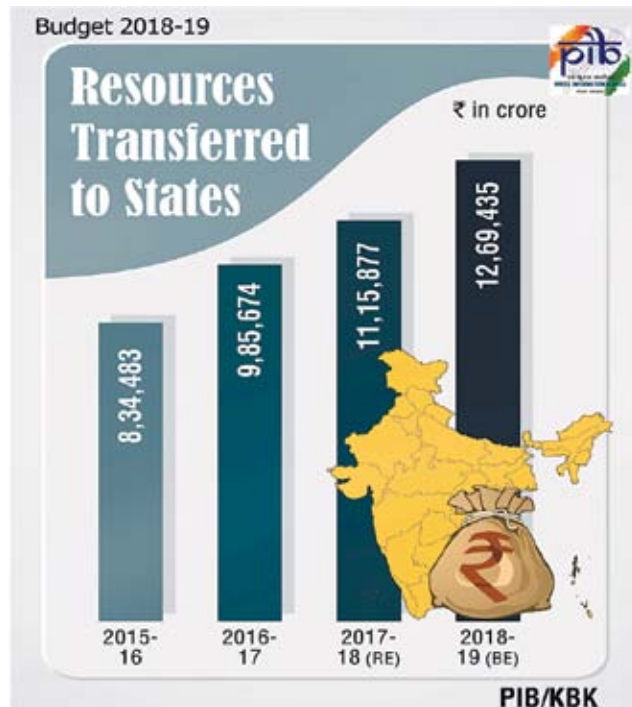
The Budget proposes to revise emoluments to Rs.5 lakh for the President, Rs 4 lakhs for the Vice President and Rs.3.5 lakh per month to Governor. These emoluments were last revised in 2006.

With regard to the emoluments paid to the Members of Parliament, the Finance Minister proposed necessary changes to refix the salary and allowances with effect from April 1, 2018. He said the law will also provide for automatic revision of emoluments every five years indexed to inflation and hoped that the Hon'ble Members will welcome this initiative.

To celebrate the 150 Birth Anniversary of Mahatma Gandhi, Father of the Nation from 2nd October 2019, the Budget set aside Rs.150 crore for the activities leading to the commemoration programme.

Fiscal Management

The Budget Revised Estimates for expenditure in 2017-18 are Rs.21.57 lakh crore (net of GST compensation transfers to the States) as against the Budget Estimates of Rs.21.47 lakh crore.



Continuing Government's path of fiscal reduction and consolidation, the Finance Minister projected a Fiscal Deficit of 3.3% of GDP for the year 2018-19. The Revised Fiscal Deficit estimates for 2017-18 were put at Rs. 5.95 lakh crore at 3.5% of GDP. He also proposed acceptance of key recommendations of the Fiscal Reform and Budget Management Committee to bring down Central Government's Debt to GDP ratio to 40%.

Budget 2018-19

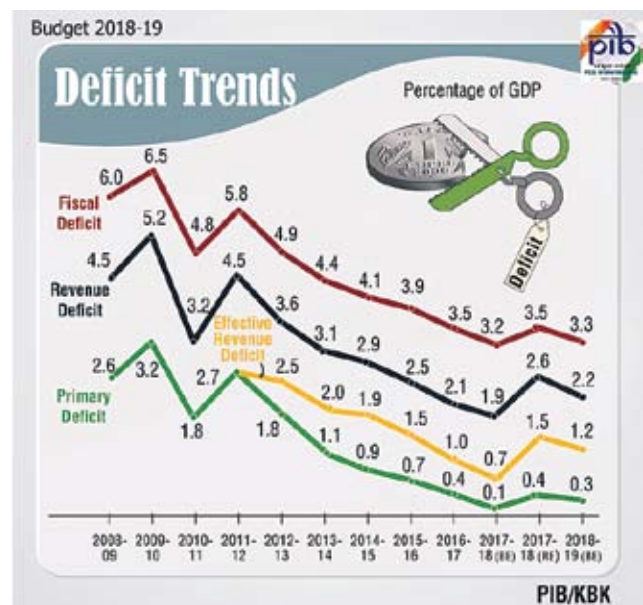
Budget Snapshot: Key Numbers

Figures in ₹ crore

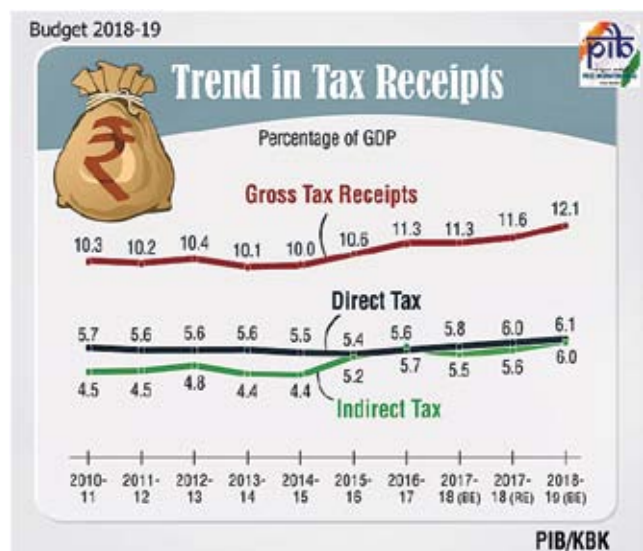
	2016-17 Actuals	2017-18 Budget Estimates	2017-18 Revised Estimates	2018-19 Budget Estimates
Revenue Receipts	13,74,203	15,15,771	15,05,428	17,25,738
Capital Receipts*	6,00,991	6,30,964	7,12,322	7,16,475
Total Receipts	19,75,194	21,46,735	22,17,750	24,42,213
Total Expenditure	19,75,194	21,46,735	22,17,750	24,42,213
Revenue Deficit	3,16,381	3,21,163	4,38,877	4,16,034
Effective Revenue Deficit	1,50,648	1,25,813	2,49,632	2,20,689
Fiscal Deficit	5,35,618	5,46,531	5,94,849	6,24,276
Primary Deficit	54,904	23,453	84,006	48,481

* Excluding receipts under Market Stabilisation Scheme

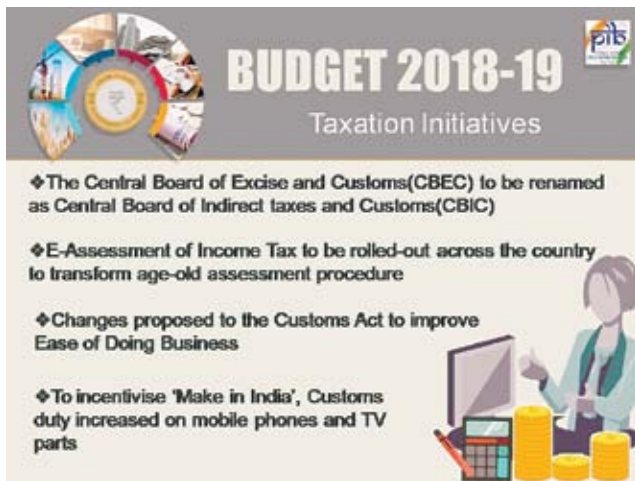
PIB/KBK



The growth of direct taxes in financial year 2016-17 was 12.6 percent, and for financial year 2017-18 (upto 15th January, 2018) is 18.7 percent. Therefore buoyancy in personal income tax for financial year 2016-17 and 2017-18 (RE) are 1.95 and 2.11 respectively. This the Finance Minister said, indicates that additional revenue collected in the last two financial years from personal income tax compared to average buoyancy for the pre 2016-17 period, amounts to a total of Rs. 90,000 crore, which is a result of a strong anti-evasion measures by the government.



There has been a huge increase in the number of returns filed by tax payers. The number of Effective Tax Payers has increased from 6.47 crore at the beginning of Financial year 2014-15 to 8.27 crore at the end of 2016-17.



Proposed 100 percent deduction to companies registered as Farmer Producer Companies with an annual turnover upto Rs. 100 crore on profit derived from such activities, for a period of five years from financial year 2018-19.

In order to encourage creation of new employment the deduction of 30 percent Under Section 80-JJAA with a further relaxation to 150 days in the case of the apparel industry, has been proposed to be extended to the footwear and leather industry. It is also proposed to rationalise the deduction of 30 percent by allowing the benefit for a new employee employed for less than the minimum period during the first year, but continues to remain employed for the minimum period in the subsequent year.

In fulfilment of the promise to reduce the corporate tax rate in a phased manner proposed to extend the reduced rate of 25 percent currently available. It proposes for companies with turnover of less than 50 crore (in Financial Year 2015-16), also to companies reporting turnover up to Rs. 250 crore in Financial Year 2016-17. This would benefit the entire class of micro, small and medium enterprises, which account for almost 99 percent of companies filing tax returns, he said. The estimated revenue forgone during Financial Year 2018-19 will be Rs. 7,000 crore. This lower corporate income tax rate would leave such companies with higher investible surplus, which would create more jobs.

Proposal to introduce tax on distributed income by equity oriented mutual funds at the rate of 10 percent.

The Budget proposals also seek to provide relief to salaried tax payers by allowing a Standard Deduction of Rs. 40,000 in place of the present exemption allowed for transport allowance and reimbursement of miscellaneous medical expenses. However, transport allowance at enhanced rate is proposed to be continued for differently abled persons. Further, it is also proposed to continue medical reimbursement benefits in case of hospitalization etc. for

all employees. The proposed Standard Deduction will help middle class employees even further in reducing their tax liabilities. It will also significantly benefit pensioners, who normally do not enjoy any allowance for transport and medical expenses. 2.5 crore salaried employees and pensioners would benefit from this proposal and the revenue cost would be approximately Rs. 8,000 crore.

Relief to Senior Citizens has also been proposed. The proposals are :-

✍ ***Proposed to extend Pradhan Mantri Vaya Vandana Yojana up to March, 2020. Current investment limit proposed to be increased to Rs. 15 lakh from the existing limit of Rs. 7.5 lakh per senior citizen.***

- ✍ Exemption of interest income on deposits with banks and post offices are proposed to be increased from Rs. 10,000 to Rs. 50,000. TDS shall not be required to be deducted under section 194A. Benefit will also be available for interest from all fixed deposit schemes and recurring deposit schemes.
- ✍ Hike in deduction limit for health insurance premium and/ or medical expenditure from Rs. 30,000 to Rs. 50,000 under section 80D.
- ✍ Increase in deduction limit for medical expenditure for certain critical illness from Rs. 60,000 (in case of senior citizens) and from Rs. 80,000 (in case of very senior citizens) to Rs. 1 lakh for all senior citizens, under section 80DDB. Concessions will give extra tax benefit of Rs. 4,000 crore to senior citizen. It is also proposed to extend the Pradhan Mantri Vaya Vandana Yojana up to March, 2020. The current investment limit is also proposed to be increased to Rs. 15 lakh from the existing limit of Rs. 7.5 lakh per senior citizen.

It is proposed to provide more concessions for International Financial Services Centre (IFSC), in order to promote trade in stock exchanges located in IFSC. The concessions propose transfer of derivatives and certain securities by non-residents from capital gains tax, and non corporate tax payers operating in IFSC to be charged Alternate Minimum Tax (AMT) at concessional rate of 9 percent at par with Minimum Alternate Tax (MAT) applicable for corporates.

In a measure that proposes to control the cash economy, payments exceeding Rs. 10,000 in cash made by trusts and institutions shall be disallowed and would be subject to tax. In order to improve TDS compliance by these entities, the Finance Minister has proposed to provide that in case of non deduction of tax, 30 percent of the amount shall be disallowed and would be taxed.

The total amount of exempted capital gains from listed shares and units is around Rs. 3,67,000 crore (as per returns filed for A.Y. 2017-18). A major part of this gain has accrued to corporates and LLPs. It is proposed to tax Long Term Capital Gains exceeding Rs. 1 lakh at the rate of 10 percent, without allowing any indexation benefit. However, all gains up to 31st January, 2018 will be grandfathered. The Finance Minister has also proposed to introduce a tax on distributed income by equity oriented mutual funds at the rate of 10 percent, to provide a level field across growth oriented funds and dividend distributing funds. The proposed change in Capital Gains Tax will bring marginal revenue gain of about Rs. 20,000 crore in the first year, in view of grandfathering.

In order to take care of the education and health care needs of Below Poverty Line (BPL) and rural families, The Budget proposes to increase the cess on personal income tax and corporation tax to 4 percent from the present 3 percent. The new cess will be called the "Health and Education Cess" and is expected to lead to a collection of an estimated additional amount of Rs. 11,000 crore.

Proposed changes in customs duty to promote creation of more jobs in the country and also to incentivise domestic

value addition and Make in India in sectors such as food processing, electronics, auto components, footwear and furniture.

It is proposed to increase customs duty on mobile phones from 15 percent to 20 percent, on some of their parts and accessories to 15 percent and on certain parts of televisions to 15 percent.

Proposal to increase cess on personal income tax and corporation tax to 4 percent from present 3 percent.

Customs duty is proposed to be reduced on raw cashew from 5 percent to 2.5 percent, to help the cashew processing industry.

It is also proposed to abolish the Education Cess and Secondary and Higher Education Cess on imported goods. In its place it is proposed to impose a Social Welfare Surcharge at the rate of 10 percent of the aggregate duties of Customs, on imported goods, to provide for social welfare schemes of the government.

With the roll of GST, the Budget also proposes to change the name of the Central Board of Excise and Customs (CBEC) to the Central Board of Indirect Taxes and Customs (CBIC).

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Q.1. Consider the following statements:

- (A) Foundation stone for Central Research Institute (CRI) was recently laid in Jaipur.
- (B) Another Central Research Institute (CRI) is also lined up in New Delhi.
- (C) Shripad Yesso Naik is the present Minister of State (IC), for AYUSH.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only A & C
- (4) All of the above
- (5) None of the above

Q.2. Consider the following statements about International Dam Safety Conference:

- (A) It was recently held at Thiruvananthapuram.
- (B) It was organized under Dam Safety Rehabilitation and Improvement Project (DRIP) project.
- (C) It is an IMF aided project.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B & C
- (3) Only A & B
- (4) All of these
- (5) None of the above

Q.3. DHARMA is a recently launched web tool. Which among the following purpose it serves?

- (1) Maintaining the number of Dams in India only.
- (2) Digitalizing the proceedings of parliament.
- (3) Online portal for Agricultural market.
- (4) Digitize all dam related data
- (5) None of these

Q.4. National Immunization Day in India is celebrated on which date in India?

- (1) 28 January (2) 21 January
- (3) 20 January (4) 2 February
- (5) 11 February

Q.5. Consider the following statements about Pulse Polio

Immunization (PPI) Program:

- (A) It was initiated in India in 1992.
- (B) It was launched under World Health Organization's (WHO) Global Polio Eradication Initiative.
- (C) Under this program, every child below five years in age is given Oral Polio Vaccine (OPV), in the month of January and December.

Choose the incorrect statement(s) from the given options:

- (1) Only B
- (2) Only B & C
- (3) Only A
- (4) All of the above
- (5) None of the above

Q.6. Which of the following ministry has recently announced to launch Stree Swabhiman Initiative.

- (1) Ministry of AYUSH
- (2) Ministry of Women and Child Development,
- (3) Ministry of Health and Family Welfare
- (4) Ministry of Electronics and Information Technology
- (5) None of these

Q.7. Consider the following statements:

- (A) Stree Swabhiman Initiative will provide access to affordable, reliable and modern (eco-friendly) sanitary napkins (menstrual pads) to adolescent girls and women all over the country.
- (B) Semi-automatic and manual sanitary napkin manufacturing units will be set up under this initiative.
- (C) Each production unit will generate employment for 8-10 women.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only B and C
- (4) All of the above

Q.8. Which among the following services will be provided by recently inaugurated high performance computer system (HPC) or supercomputer Mihir :

- (A) Weather forecasts
- (B) Ocean state forecasts
- (C) Air quality forecasts
- (D) Flood forecast
- (E) Climate projections

Choose the correct statement(s) from the given options:

- (1) A, B & C only
- (2) B, C, D & E Only
- (3) A, B, C & E Only
- (4) All of the above
- (5) None of the above

Q.9. Consider the following statements about Government e-Marketplace (GeM).

- (A) It is an Online Market platform to facilitate procurement of goods and services by various Ministries and agencies of the Government
- (B) It aims to enhance transparency, efficiency and speed in public procurement of goods and services and eliminate corruption.
- (C) It is completely paperless, cashless and system driven e-market place

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.10. Consider the following statements about Nanaji Deshmukh Krishi Sanjivani Yojna:

- (A) This scheme will be launched in Maharashtra.
- (B) Its aim is to promoting climate-resilient agriculture.
- (C) 70% of the project cost will be borne by World Economic Forum.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only A & B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.11. Consider the following statements:

- (A) Government of Uttarakhand has signed a \$120 million Loan Agreement with the World Bank Board.
- (B) This will increase access to improved water supply services in peri-urban areas of the state.
- (C) The water facility would be provided through piped network and metered service connections.

Choose the incorrect statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.12. In which among the following state Chief Minister-gi Hakshelgi Tengbang (CMHT) scheme was launched recently?

- (1) Manipur (2) Nagaland
- (3) Mizoram (4) Meghalaya
- (5) Assam

Q.13. Which of the following critical ailment is/are not included for the treatment under Chief Minister-gi Hakshelgi Tengbang (CMHT) scheme?

- (A) cardiovascular diseases
- (B) neurological conditions
- (C) kidney ailments
- (D) liver ailments
- (E) Tuberculosis

Choose the correct answer from the codes given:

- (1) Only A, B, C
- (2) Only A, B, C & D
- (3) Only D
- (4) Only E
- (5) None of these

Q.14. Telangana recently signed a memorandum of understanding (MoU) with Clean Authority of Tokyo for cooperation in which among the following field?

- (1) Air Pollution
- (2) Clean water
- (3) Agriculture
- (4) Solid waste incineration
- (5) None of these

Q.15. Which city has recently became the first metro city in India to get floating market.

- (1) New Delhi (2) Mumbai
- (3) Kolkata (4) Bengaluru
- (5) None of these

Q.16. Consider the following statements:

- (A) The floating market in Kolkata is located on lake at Patuli.
- (B) It is similar to the one in Maynmar.
- (C) The Kolkata Metropolitan Development Authority (KMDA) is executing agency of floating market.

Choose the incorrect statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.17. Consider the following statements:

- (A) 'Shakti' app was recently launched in Himachal Pradesh.
- (B) Its main objective is to provide Women Safety.
- (C) It was developed by the National Informatics Centre (NIC).

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.18. Consider the following statements about Mahatma Gandhi Sarbat Vikas Yojna (MGSVY):

- (A) It was launched by Punjab Government.
- (B) It will work on the line of Antyodaya principles and will be implemented in the

state's rural areas.

- (C) It will benefit 18 marginalized sections living in rural areas.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.19. Consider the following statements:

- (A) Government has inked \$100 million Loan Agreement with World Bank.
- (B) This loan will boost the agriculture of Tamil Nadu.
- (C) The project will be operational in 120 blocks across 3,994 villages in 26 Districts of Tamil Nadu.

Choose the correct statement(s) from the given options:

- (1) Only A (2) Only B
- (3) Only C (4) Only A & C
- (5) Only B & C

Q.20. Which among the following state is/are not covered under the Loan Agreement with Asian Development Bank (ADB) to Improve Rural Connectivity?

- (A) Odisha (B) Assam
- (C) Chhattisgarh (D) Bihar
- (E) Uttar Pradesh

Choose the answer from the codes given:

- (1) Only A & B
- (2) Only A & C
- (3) Only D & E
- (4) All of the above
- (5) None of these

Q.21. Who has been appointed as the governor of Madhya Pradesh?

- (1) Vijay Rupani
- (2) Anandiben Patel
- (3) Vajubhai Vala
- (4) Om Prakash Kohli
- (5) None of these

Q.22. Consider the following statements:

- (A) Sushant Kumar Roy has recently been appointed as the Executive Director (Projects) at NTPC.

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(B) NTPC's only function is generation of electricity

(C) NTPC was conferred Maharatna status in 2010.

Choose the incorrect statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) Only A & B
- (5) All of the above

Q.23. Who has been recently appointed as the Director of Vikram Sarabhai Space Centre (VSSC)?

- (1) R. K. Shastri
- (2) V Narayanan
- (3) K. Sivan
- (4) S Somanath
- (5) None of these

Q.24. Consider the following statements:

- (A) Vikram Sarabhai Space Centre functions under Department of Space.
- (B) It is located in Thiruvananthapuram, Kerala.
- (C) It was earlier named as Thumba Equatorial Rocket Launching Station.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.25. Who has been appointed as the Director of ISRO's Liquid Propulsion Systems Centre (LPSC)?

- (1) R. K. Sharma
- (2) K. Sivan
- (3) B S Sehrawat
- (4) Dr V Narayanan
- (5) None of these

Q.26. Who has sworn in as the 16th Chairman of the Federal Reserve?

- (1) Jerome Powell
- (2) Janet Yellen
- (3) Haruhiko Kuroda
- (4) Elvira Nabiullina
- (5) Thomas Jordan

Q.27. Sudeep Lakhtakia recently took charge as the Director General

(DG) of National Security Guard (NSG). Whom did he succeed?

- (1) K. Acharya
- (2) M. K. Singh
- (3) S P Singh
- (4) Sudhir Yadav
- (5) None of these

Q.28. With which Finance bank LIC has signed an MoU to offer Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY).

- (1) AU Small Finance bank
- (2) Utkarsh Small Finance Bank
- (3) Equitas Small Finance Bank
- (4) Ujjivan Small Finance Bank
- (5) None of these

Q.29. Consider the following statements:

- (A) NIIF has partnered with DP World to create an investment platform in India.
- (B) NIIF was set-up to function as a major platform in India for attracting foreign investments.
- (C) GOI's contribution to the AIFs under the NIIF scheme shall be 79% of the total commitment.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only A & B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.30. Which among the following organization releases the Inclusive Development Index.

- (1) World Bank
- (2) IMF
- (3) World Economic Forum
- (4) UNFCCC
- (5) G20

Q.31. What was the color of the Economic Survey 2017-2018 document?

- (1) White
- (2) Blue
- (3) Yellow
- (4) Red
- (5) None of these

Q.32. Which of the following indices were taken into account for the Inclusive Development Index:

- (A) Living standards

(B) Environmental sustainability
(C) Poverty

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only A & C
- (3) Only A & B
- (4) All of the above
- (5) None of the above

Q.33. India was ranked at the _____ place among emerging economies on an Inclusive Development Index.

- (1) 63rd
- (2) 62nd
- (3) 60th
- (4) 53rd
- (5) 100th

Q.34. For the implementation of which among the following scheme Indian Overseas Bank signed an MOU with National Housing Bank?

- (1) Rural Housing Interest Subsidy Scheme
- (2) Urban Housing Interest Subsidy Scheme
- (3) Rural infrastructural development Scheme
- (4) Rural housing Subsidy Scheme
- (5) None of these

Q.35. What is the Tagline of Indian Overseas Bank?

- (1) The name you can bank upon
- (2) India's International Bank
- (3) Relationship beyond banking
- (4) Good People to grow with
- (5) Tradition of Trust

Q.36. Consider the following statements:

- (A) World Economic Outlook is released by International Monetary Fund (IMF).
- (B) It has projected India's growth at 7.4% of its gross domestic product (GDP) in 2018
- (C) It is usually prepared twice a year.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.37. India has overtaken which country to become the world's

third largest steel producer in 2017.

- (1) China (2) US
- (3) Australia (4) Russia
- (5) None of these

Q.38. CriSidEx is India's first MSE Sentiment Index. It is launched by ___?

- (1) SIDBI & RBI
- (2) RBI & Crisil
- (3) SIDBI & Crisil
- (4) SBI & Crisil
- (5) None of these

Q.39. Consider the following statements about Start-up-India ranking framework:

- (A) It is unveiled by Department of Industrial Policy and Promotion (DIPP) under Commerce Ministry.
- (B) Its aim is to foster competitiveness among states/UTS to act proactively in startup matters
- (C) It was launched by Union Minister of Commerce and Industry.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.40. Development Impact Bond (DIB) is related to which among the following fields?

- (1) Agriculture (2) Investment
- (3) Education (4) Healthcare
- (5) None of these

Q.41. Consider the following statements about Development Impact Bond (DIB):

- (A) It is launched by Britain's Prince Charles.
- (B) It is the latest fundraising initiative by British Asian Trust (BAT).
- (C) It was launched 10 years ago to fight poverty in India only.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only A & B

- (3) Only A & C
- (4) All of the above
- (5) None of the above

Q.42. Who among the following has imposed Rs. 136 crore fine on world's most popular search engine Google?

- (1) Competition Commission of India
- (2) Reserve Bank of India
- (3) Ministry of Finance
- (4) Election Commission of India
- (5) None of these

Q.43. Who among the following has imposed ban on Google for anti-trust setbacks before India?

- (1) European Union and Russia
- (2) Japan and Russia
- (3) European Union and China
- (4) Switzerland and Russia
- (5) None of these

Q.44. What is India's rank at Environmental Performance Index (EPI) – 2018?

- (1) 180 (2) 177
- (3) 175 (4) 172
- (5) 134

Q.45. Who among the following is not involved in the development of Environmental Performance Index (EPI) – 2018:

- (A) Yale University
- (B) Columbia University
- (C) World Economic Forum

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.46. Which of the following issues were considered while calculating Environmental Performance Index:

- (A) Air Pollution
- (B) Agriculture
- (C) Heavy Metals
- (D) Water & Sanitation
- (E) Climate & Energy

Choose the correct statement(s) from the given options:

- (1) Only A, B & C
- (2) Only B, C & E
- (3) Only A, B, C & E

- (4) All of the above
- (5) None of the above

Q.47. Rotavac became first Indigenously developed vaccine from India to be pre-qualified by World Health Organisation (WHO). It is related to which of the following disease?

- (1) AIDS (2) diarrhoea
- (3) Tuberculosis (4) Pneumonia
- (5) None of these

Q.48. Recently a small population of fish that walk along the seabed is discovered in Tasmania. Where is Tasmania situated?

- (1) South Africa (2) America
- (3) Australia (4) India
- (5) Indonesia

Q.49. Green Good Deeds campaign was launched recently. What is its objective?

- (1) To sensitise people about climate change
- (2) To sensitise people about global warming
- (3) To create awareness about Pollution
- (4) Both A & B
- (5) None of these

Q.50. In which bird sanctuary 'Pelican Bird Festival-2018' was held recently?

- (1) Chilka Lake Bird Sanctuary
- (2) Sultanpur Bird Sanctuary
- (3) Bharatpur Bird Sanctuary
- (4) Atapaka Bird Sanctuary
- (5) None of these

Q.51. Consider the following statements about Kolleru Lake:

- (A) It is one of the largest freshwater lakes in India.
- (B) It is located in Andhra Pradesh.
- (C) It is located between Krishna and Godavari deltas.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.52. Consider the following statements about Agni-I Missile:

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- (A) It is indigenously developed intermediate range surface-to-surface, single-stage missile.
 (B) It was developed by ISRO.
 (C) It weighs around 12 tonnes and is propelled by a solid rocket propellant system.

Choose the correct statement(s) from the given options:

- (1) Only A
 (2) Only B
 (3) Only C
 (4) All of the above
 (5) None of the above

Q.53. Consider the following statements about Global Centre for Cybersecurity:

- (A) It is launched by World Bank.
 (B) It is headquartered in Geneva
 (C) It aims to make bank transactions safe from ransomware only.

Choose the correct statement(s) from the given options:

- (1) Only A
 (2) Only B
 (3) Only C
 (4) None of the above
 (5) None of the above

Q.54. In which of the following two fields MoU's were signed between India and Vietnam.

- (1) Education, Agriculture
 (2) Space, Agriculture
 (3) Health, Agriculture
 (4) Space, Information and broadcasting
 (5) None of these

Q.55. What is the capital of Vietnam?

- (1) Hanoi (2) Da Nang
 (3) Can Tho (4) HaiPhong
 (5) None of these

Q.56. Leaders of the Association of Southeast Asian Nations or ASEAN was guests of honour in India's 69th Republic day celebration. Which among the following country is/are not a member of ASEAN?

- (A) Thailand (B) Vietnam
 (C) Malaysia (D) India
 (E) Bangladesh

Choose the correct answer

from the codes given.

- (1) Only A, C & D
 (2) Only A, B, C & D
 (3) Only A, B & C
 (4) All of the above
 (5) None of these

Q.57. Recently ASEAN-India Commemorative Summit was held in New Delhi. What was the theme of this summit.

- (1) Shared Destiny, Common Values
 (2) Same Values, Same Destiny
 (3) Shared Values, Common Destiny
 (4) Shared Values, Similar Destiny
 (5) None of these

Q.58. Consider the following statements about ASEAN:

- (A) It is headquartered in Jakarta, Indonesia.
 (B) It is founded in 1967.
 (C) Its motto is One Vision, One Identity, One Community.

Choose the correct statement(s) from the given options:

- (1) Only A
 (2) Only B
 (3) Only C
 (4) All of the above
 (5) None of the above

Q.59. India has recently joined Ashgabat Agreement. Ashgabat is the capital of which country?

- (1) Iraq (2) Oman
 (3) Turkmenistan (4) Afghanistan
 (5) None of these

Q.60. Consider the following statements Ashgabat Agreement:

- (A) It was signed in April 2010
 (B) It establishes international transport and transit corridor between Central Asia and the Persian Gulf countries.
 (C) Pakistan is also its member.

Choose the incorrect statement(s) from the given options:

- (1) Only A
 (2) Only B
 (3) Only C
 (4) All of the above
 (5) None of the above

Q.61. Name the guest of honor country in the National Heritage Festival of Saudi Arabia.

- (1) India (2) China
 (3) USA (4) Russia
 (5) None of these

Q.62. Prime Minister Narendra Modi recently visited Palestine. Who is the President of Palestine?

- (1) Mohammed Dehlan
 (2) Rawahi Fattuh
 (3) Ahmed Qurei
 (4) Mahmoud Abbas
 (5) None of these

Q.63. According to a report by World Steel Association (WSA), India has overtaken US to become the world's _____ largest steel producer in 2017.

- (1) Second (2) Third
 (3) Fourth (4) Eighth
 (5) Ninth

Q.64. Which State Government has launched Zero Budget Natural Farming (ZBNF) project to promote organic farming?

- (1) Himachal Pradesh
 (2) Uttar Pradesh
 (3) Uttarakhand
 (4) Arunachal Pradesh
 (5) Andhra Pradesh

Q.65. Who has been honoured with the Life Time Achievement Award by Badminton Association of India (BAI)?

- (1) Pullela Gopichand
 (2) Prakash Padukone
 (3) Saina Nehwal
 (4) Arvind Bhat
 (5) P.V. Sandhu

Q.66. Consider the following statements:

- (A) 'Aircapocalypse' is an air pollution measurement report.
 (B) It is released by Greenpeace India.
 (C) According to the report Mumbai is the most polluted city.

Choose the correct statement(s) from the given options:

- (1) Only A
 (2) Only A & B
 (3) Only B & C
 (4) All of the above
 (5) None of the above

- Q.67.** According to the second edition of annual report 'Airpocalypse', Which State is the India's most polluted state?
 (1) Tamilnadu
 (2) Madhya Pradesh
 (3) Uttar Pradesh
 (4) Rajasthan
 (5) Kerala
- Q.68.** With which country India has organised a six day-long military exercise 'VINBAX' in Madhya Pradesh.
 (1) Thailand (2) Malaysia
 (3) Vietnam (4) Saudi Arab
 (5) Afghanistan
- Q.69.** Who has inaugurated the High Performance Computer (HPC) System named 'Mihir' at the National Centre for Medium Range Weather Forecasting (NCMRWF) at Noida?
 (1) Venkaiah Naidu
 (2) Narendra Modi
 (3) Dr. Harsh Vardhan
 (4) Ram Nath Kovind
 (5) Arun Jatelly
- Q.70.** What is the Name of third Scorpene class submarine which is recently launched by Indian Navy?
 (1) Arihant (2) Rakshak
 (3) Kamal (4) Kalvari
 (5) Karanj
- Q.71.** Who has launched the first Khelo India School Games at Indira Gandhi Indoor Stadium in New Delhi?
 (1) Ramnath Kovind
 (2) Yogi Adityanath
 (3) Narendra Modi
 (4) Smriti Irani
 (5) Rajyavardhan Rathore
- Q.72.** India Energy Congress 2018 was recently held in which city?
 (1) Lucknow
 (2) Kanpur
 (3) Mumbai
 (4) Dehradun
 (5) New Delhi
- Q.73.** Who has been appointed as the Director General (DG) of the Sports Authority of India (SAI)?
 (1) Vinod Singh
 (2) Raj Kumar
 (3) Pooja Kumari
 (4) Neelam Kapoor
- (5) Akash Sharma
- Q.74.** In which city 32nd Surajkund International Crafts Mela was held recently?
 (1) New Delhi
 (2) Ambala
 (3) Kurukshetra
 (4) Hisar
 (5) Faridabad
- Q.75.** Who among the following has won Gold medal in India Open boxing tournament in New Delhi?
 (1) Farida Narang
 (2) Kavita Chahal
 (3) MC Mary Kom
 (4) Kavita Goyat
 (5) Sarita Devi
- Q.76.** Who among the following has been recently appointed as the Chief Executive officer of Nuclear Fuel Complex (NFC)?
 (1) Sudhir Narayan
 (2) Vijay Raghavan
 (3) G Kalyanakrishnan
 (4) Dinesh Srivastava
 (5) Vikas Goyal
- Q.77.** Which of the following wildlife sanctuary has been approved by Maharashtra Government recently?
 (1) Ghodazari (2) Pangula
 (3) Koyna (4) Bor
 (5) Pench
- Q.78.** In which city Indian Council of Medical Research (ICMR) and Pfizer will set up a Centre to combat antimicrobial resistance (AMR)?
 (1) Lucknow (2) New Delhi
 (3) Dehradun (4) Mumbai
 (5) Kanpur
- Q.79.** Mahendra Singh Dhoni has become the _____ wicketkeeper to effect 400 dismissals in One Day Internationals.
 (1) Seventh (2) Fifth
 (3) Fourth (4) Second
 (5) Third
- Q.80.** Who among the following has laid the foundation stone of Rhodendron Park in Tawang district?
 (1) Ram Nath Kovind
 (2) Sumitra Mahajan
 (3) Venkaiah Naidu
- (4) Narendra Modi
 (5) Pema Khandu
- Q.81.** Competition Commission of India (CCI) has imposed a fine of Rs _____ on Google for unfair business practices for online search in India.
 (1) 186 Crore (2) 126 Crore
 (3) 156 Crore (4) 146 Crore
 (5) 136 Crore
- Q.82.** What is the Name of An eight-year-old Indian-origin schoolgirl who has entered the UK's 'Mathletics Hall of Fame'?
 (1) Sohini Roy Chowdhury
 (2) Nikita Verma
 (3) Pragya Singh
 (4) Garima Sharma
 (5) Ritu Jain
- Q.83.** Which State has topped the overall medal tally in first Khelo India School Games?
 (1) Haryana
 (2) Maharashtra
 (3) Rajasthan
 (4) Bihar
 (5) Madhya Pradesh
- Q.84.** Who has sworn-in as new Chief Justice of the High Court of Manipur?
 (1) Abhilasha Kumari
 (2) Hemant Gupta
 (3) Indira Banerjee
 (4) Dinesh Maheshwari
 (5) Rajendra Menon
- Q.85.** What is Rank of India in latest FIFA Ranking?
 (1) 102 (2) 100
 (3) 101 (4) 108
 (5) 107
- Q.86.** What is India's rank in the annual ranking of Leadership in Energy and Environmental Design (LEED) certified buildings.
 (1) 2nd (2) 3rd
 (3) 4th (4) 5th
 (5) 6th
- Q.87.** Consider the following statements about Leadership in Energy and Environmental Design (LEED) certified buildings:
 (A) It is released by US Green Building Council.
 (B) Its president is Mahesh Ramanujam.

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(C) The top 10 list is led by China.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.88. What is India's rank in Inclusive Development Index (IDI-2018)?

- (1) 61th
- (2) 62nd
- (3) 63rd
- (4) 64th
- (5) 50th

Q.89. According to Inclusive Development Index (IDI-2018), which country is world's most inclusive advanced economy?

- (1) Switzerland
- (2) India
- (3) Norway
- (4) Lithuania
- (5) None of these

Q.90. Which among the following is not a criteria for Inclusive Development Index (IDI-2018).

- (1) Living standards
- (2) Environmental sustainability
- (3) Protection of future generations from further indebtedness
- (4) All of the above
- (5) None of these

Q.91. Name the Indian-origin boy who became youngest applicant in decade to achieve highest score in Mensa IQ test.

- (1) Swarndeep Singh
- (2) Nitesh Arora
- (3) Mayank Sharma
- (4) Mehul Garg
- (5) None of these

Q.92. Which is the first ever Oxford Dictionaries Hindi Word of the Year?

- (1) aadhaar
- (2) Namasty
- (3) Bharat
- (4) Pranaam
- (5) None of these

Q.93. India has been ranked ___ in annual 2017 Global Democracy Index (GDI).

- (1) 43rd
- (2) 42nd
- (3) 41th
- (4) 40th
- (5) 39th

Q.94. Consider the following statements annual 2017 Global Democracy Index (GDI):

(A) It is released by UK-based Company, Economist Intelligence Unit (EIU).

(B) The index is topped by Norway.

(C) North Korea was ranked lowest in the index.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.95. Consider the following statements:

(A) 7th India Energy Congress (IEC) 2018 was held in Hyderabad.

(B) It is inaugurated by Union Power and New and Renewable Energy Minister R K Singh.

(C) The theme for the conference is Energy (4)0: Energy Transition Towards 2030.

Choose the incorrect statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.96. Consider the following statements about World University Rankings:

(A) It is released by TIMES Higher Education (THE).

(B) 17 institutes from India are there in top 200 Asian Universities.

(C) IIT Madras has witnessed biggest decline this year in the ranking.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.97. Which two Indian institutes have made their way to top 50 in World University Rankings for educational institutes in Asia?

(1) Indian Institute of Management and Indian Institute of Technology, Delhi

(2) Banaras Hindu University and Indian Institute of Technology, Bombay

(3) Indian Institute of Management and Indian Institute of Technology, Roorkee

(4) Indian Institute of Science and Indian Institute of Technology, Bombay

(5) None of these

Q.98. With which among the following Google has signed a pact to integrate a course on 'Digital Citizenship and Safety'?

- (1) IIT Chennai
- (2) IIM Ahmedabad
- (3) CBSE
- (4) NCERT
- (5) None of these

Q.99. 'Safer Internet Day' is celebrated on _____?

- (1) 1st February
- (2) 6th February
- (3) 11th February
- (4) 25th February
- (5) None of these

Q.100. Consider the following statements Intellectual Property (IP) Index:

(A) It is released by World Intellectual Property Organization.

(B) India is ranked 43rd this year.

(C) US is at top of the index.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B & C
- (3) Only A & C
- (4) All of the above
- (5) None of the above

Q.101. Cyril Ramaphosa has been sworn in as the new President of which nation?

- (1) Zimbabwe
- (2) Ankara
- (3) South Africa
- (4) Libya
- (5) Palestine

Q.102. The Supreme Court recently announced its verdict on the dispute between states over which river's water?

- (1) Krishna (2) Cauvery
(3) Mahanadi (4) Godavari
(5) Son

Q.103. Which city hosted the World Sustainable Development Summit 2018?

- (1) Davos (2) Zurich
(3) New Delhi (4) Colombo
(5) Kathmandu

Q.104. Who among the following has been recently elected as the new president of Sahitya Akademi?

- (1) Chandrashekhara Kambara
(2) Bhalchandra Nemade
(3) Pratibha Ray
(4) Madhav Koushik
(5) None of the above

Q.105. According to ADR report on current Chief Ministers of India, which CM is the wealthiest with the highest number of declared assets against his name?

- (1) Pema Khandu
(2) Amarinder Singh
(3) Chandrababu Naidu
(4) Devendra Fadnavis
(5) Yogi Adityanath

Q.106. Which Chief Minister was found to be the poorest among all the current CMs in the ADR report?

- (1) Mamata Banerjee
(2) Manik Sarkar
(3) Mehbooba Mufti
(4) Yogi Adityanath
(5) None of these

Q.107. Who has been appointed as India's new Ambassador to Brazil?

- (1) Ashok Das
(2) Rajiv Singh
(3) Sudarshan Kumar
(4) Rahul Bhatia
(5) None of the above

Q.108. Which state's government has recently launched the DASTAK campaign to eradicate Japanese Encephalitis?

- (1) Madhya Pradesh
(2) Uttar Pradesh
(3) Rajasthan
(4) Maharashtra
(5) Jharkhand

Q.109. Which nation is the latest to withdraw from the UN refugee programme?

- (1) Tanzania (2) Zambia

- (3) Kenya (4) Ghana
(5) Angola

Q.110. Which state government has recently banned the sale of loose cigarettes in the state?

- (1) Bihar (2) Rajasthan
(3) Punjab (4) Maharashtra
(5) Uttar Pradesh

Q.111. Gevora, the world's tallest hotel has recently inaugurated in which country?

- (1) USA (2) Japan
(3) Dubai (4) China
(5) Russia

Q.112. Which Union Minister launched the National Deworming Initiative in Gurugram?

- (1) J P Nadda
(2) Venkaiah Naidu
(3) Suresh Prabhu
(4) Ram Nath Kovind
(5) Arun Jately

Q.113. Which nation has agreed to allow Indian pilgrims to undertake Mansarovar yatra through Nathu La?

- (1) China (2) Bhutan
(3) Nepal (4) Myanmar
(5) Tibet

Q.114. Mobile Democracy Vans have been deployed in which state to create voter awareness?

- (1) Manipur (2) Nagaland
(3) Meghalaya (4) Rajasthan
(5) Mizoram

Q.115. Union Cabinet was apprised of an MoU signed between India and which country for cooperation on Youth matters?

- (1) China (2) Tunisia
(3) USA (4) Egypt
(5) Palestine

Q.116. Which large state has been ranked at the top in NITI Aayog's Health Index?

- (1) Maharashtra
(2) Kerala
(3) Gujarat
(4) Uttar Pradesh
(5) Madhya Pradesh

Q.117. Among the Union Territories, which one fared the best in NITI Aayog's 'Healthy States, Progressive India' report?

- (1) Andaman & Nicobar Islands
(2) Pondicherry

- (3) Lakshadweep
(4) Chandigarh
(5) Daman & Diu

Q.118. The Union Cabinet approved signing of a protocol to amend the double taxation avoidance agreement between India and which country?

- (1) China (2) USA
(3) Indonesia (4) Australia
(5) UAE

Q.119. Which among the following is the online security campaign launched by Google India recently?

- (1) #InternetSecureKiya
(2) #OnlineCheckKiya
(3) #SecurityCheckKiya
(4) #InternetSafetyKiyaKya
(5) None of the above

Q.120. What does the pink color of the Economic Survey 2017-18 represent?

- (1) Gender and Son meta-preference
(2) Women empowerment
(3) Girl Education
(4) All of the above
(5) None of the above

Q.121. Which city has launched India's largest floating treatment wetland (FTW)?

- (1) Hyderabad (2) Mumbai
(3) Delhi (4) Lucknow
(5) Cochin

Q.122. India recently contributed how much additional amount to the UN Development Partnership Fund?

- (1) \$1 mn (2) \$2 mn
(3) \$5 mn (4) \$6 mn
(5) \$10 mn

Q.123. According to a report by Greenpeace India, how many Indian cities meet the air quality standards set by WHO?

- (1) 11 (2) 5
(3) None (4) 2
(5) 4

Q.124. The National Girl Child Day is observed on which day?

- (1) January 24 (2) January 22
(3) February 2 (4) January 25
(5) 20 February

Q.125. Which country was the partner country at the 32nd Surajkund International Crafts Mela?

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- (1) Kyrgyzstan
- (2) Afghanistan
- (3) Kazakhstan
- (4) Turkmenistan
- (5) UAE

Q.126. Who has been honoured with the 2018 Sahitya Akademi Bhasha Samman award?

- (1) Kaikala Satyanarayana
- (2) Shesh Anand Madhukar
- (3) Ramanujan Pillai
- (4) Rahul Sankarnarayan
- (5) None of the above

Q.127. The Inland Waterways Authority of India (IWAI) recently signed a project agreement with World Bank for Jal Marg Vikas Project (JMVP) for which river?

- (1) Yamuna
- (2) Godavari
- (3) Cauvery
- (4) Ganga
- (5) Narmada

Q.128. People around the world witnessed a rare celestial event on January 31. The lunar trifecta was the collision of which three rare events?

- (1) Blood Moon, Super Moon and Blue moon
- (2) Lunar eclipse, Super Moon and Solar eclipse
- (3) Lunar eclipse, Solar eclipse and Red Moon
- (4) Partial Lunar eclipse, Blue moon and meteor shower
- (5) None of the above

Q.129. Which state's government has approved a proposal to provide sanitary napkins at a subsidised rate of Rs 5 to women living in rural areas?

- (1) Rajasthan
- (2) Maharashtra
- (3) Uttar Pradesh
- (4) Karnataka
- (5) Madhya Pradesh

Q.130. The Anti-Leprosy Day was observed in India on which day?

- (1) January 29
- (2) January 30
- (3) January 25
- (4) January 22
- (5) January 28

Q.131. The Outstanding Parliamentary award for the year 2017 went to which Member of Parliament?

- (1) Najma Heptulla
- (2) Dinesh Trivedi

- (3) Ghulam Nabi Azad
- (4) Bhartruhari Mahatab
- (5) None of the above

Q.132. Cultural extravaganza "2018 Bharat Parv" was organised at which Indian monument?

- (1) Red Fort
- (2) India Gate
- (3) Jantar mantar
- (4) Qutub Minar
- (5) None of the above

Q.133. Which state cabinet approves 'one district, one product' scheme?

- (1) Uttar Pradesh
- (2) Madhya Pradesh
- (3) Karnataka
- (4) Gujarat
- (5) Maharashtra

Q.134. A new Scheme "Operation Greens" was announced in Union Budget 2018. It will be launched to address which of the following issue?

- (1) Deforestation
- (2) Air Pollution
- (3) Price Fluctuation of certain vegetables
- (4) Cleaning of river Ganga
- (5) None of these

Q.135. Consider the following statements about Gramin Agricultural Markets (GrAMs):

- (A) It will be electronically linked to e-NAM.
- (B) It will be exempted from regulations of APMCs
- (C) It will provide farmers facility to make direct sale to consumers and bulk purchasers.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C
- (4) All of the above
- (5) None of the above

Q.136. Which among the following is termed as 'Green Gold' in Budget 2018-19?

- (1) Neem
- (2) Bamboo
- (3) Peepal
- (4) Wheat
- (5) None of these

Q.137. How much amount is allocated to Ministry of Food Processing in Union Budget 2018-19?

- (1) Rs.1200 crore
- (2) Rs.1300 crore
- (3) Rs.1400 crore
- (4) Rs.1500 crore
- (5) Rs.1600 crore

Q.138. In the Union Budget 2018-19, Loans to Women Self Help Groups is increase to ___ in 2019 from 42,500 crore last year.

- (1) Rs 74000 Crore
- (2) Rs 75000 Crore
- (3) Rs 76000 Crore
- (4) Rs 77000 Crore
- (5) None of these

Q.139. Consider the following statements:

- (A) Ujjwala Scheme is for free LPG connections.
- (B) Earlier target for Ujjwala scheme is to provide free connections to 5 crore women.
- (C) In Union Budget 2018-19 the target has been doubled to 10 Crore.

Choose the correct statement(s) from the given options:

- (1) Only A & B
- (2) Only B
- (3) Only A & C
- (4) All of the above
- (5) None of the above

Q.140. Saubahagya Yojana is related to which of the following fields?

- (1) Providing Clean Drinking Water
- (2) Free electricity connection
- (3) Nutritional support to lactating mothers
- (4) Free LPG connection
- (5) None of these

Q.141. As per Union Budget 2018-19, Ekalavya Residential School will be established by 2022. It will be established for which of the following community?

- (1) Schedule Castes
- (2) Schedule Tribes
- (3) Migrants from different countries
- (4) All of the above
- (5) None of these

Q.142. Consider the following statements about 'Prime Minister's Research Fellows (PMRF)':

(A) Under this, 1,000 best B.Tech and B.Sc. students will be identified each year from premier institutions.

(B) This scheme will provide students facilities to do Ph.D.

(C) Selected students will pursue Ph.D from IITs and IISc.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B & C
- (3) Only A & C
- (4) All of the above
- (5) None of the above

Q.143. Consider the following statements about National Health Protection Scheme:

(A) It will cover over 10 crore poor and vulnerable families.

(B) It will provide coverage up to 5 lakh rupees per family per year.

(C) The scheme is for secondary and tertiary care hospitalization.

Choose the correct statement(s) from the given options:

- (1) Only A
- (2) Only B
- (3) Only C

- (4) All of the above
- (5) None of the above

Q.144. The Government In Union Budget 2018-19, has announced to allocate additional _____ to provide nutritional support to all TB patients

- (1) Rs.600 crore
- (2) Rs.800 crore
- (3) Rs.1000 crore
- (4) Rs.900 crore
- (5) Rs.1600 crore

Q.145. As per the Union Budget 2018-19, How many new Government Medical Colleges and Hospitals will be set up by upgrading existing district hospitals in the country.

- (1) 23
- (2) 24
- (3) 25
- (4) 26
- (5) 27

Q.146. How much amount does union budget 2018-19 has propose for Textile sector?

- (1) Rs.7140 crore
- (2) Rs.7145 crore
- (3) Rs.7110 crore
- (4) Rs.7148 crore
- (5) Rs.7149 crore

Q.147. In the economic Survey 217-18, What will be areas of focus in the medium term?

- (1) Agriculture, education, and gender equality

(2) Agriculture, education, and women empowerment

(3) Agriculture, education, and employment

(4) Entrepreneurship, education, and employment

(5) None of these

Q.148. What is the increase in indirect tax collections of the Centre during April-November 2017 period?

- (1) 13.4%
- (2) 14.3%
- (3) 18.3%
- (4) 19.5%
- (5) None of these

Q.149. By what percent the GST has increased the number of unique indirect taxpayers?

- (1) 50%
- (2) 20%
- (3) 30%
- (4) 40%
- (5) None of these

Q.150. Which among the following states are the states with highest GST registrants?

- (1) Karnataka, Kerela, UP, Bihar
- (2) Karnataka, Kerela, UP, Rajasthan
- (3) MP, UP, New Delhi, Gujrat
- (4) Maharashtra, UP, Tamilnadu, Gujrat
- (5) MP, Maharashtra, New Delhi, Gujrat

ANSWER KEY

Q.1.(3)	Q.2.(3)	Q.3.(4)	Q.4.(1)	Q.5.(3)	Q.6.(4)	Q.7.(3)	Q.8.(3)	Q.9.(4)	Q.10.(2)
Q.11.(4)	Q.12.(1)	Q.13.(4)	Q.14.(4)	Q.15.(3)	Q.16.(2)	Q.17.(4)	Q.18.(4)	Q.19.(4)	Q.20.(3)
Q.21.(2)	Q.22.(4)	Q.23.(4)	Q.24.(4)	Q.25.(4)	Q.26.(1)	Q.27.(3)	Q.28.(1)	Q.29.(2)	Q.30.(3)
Q.31.(3)	Q.32.(3)	Q.33.(2)	Q.34.(1)	Q.35.(4)	Q.36.(4)	Q.37.(2)	Q.38.(3)	Q.39.(4)	Q.40.(3)
Q.41.(2)	Q.42.(1)	Q.43.(1)	Q.44.(2)	Q.45.(4)	Q.46.(4)	Q.47.(2)	Q.48.(3)	Q.49.(4)	Q.50.(4)
Q.51.(4)	Q.52.(4)	Q.53.(2)	Q.54.(4)	Q.55.(1)	Q.56.(3)	Q.57.(3)	Q.58.(4)	Q.59.(3)	Q.60.(1)
Q.61.(1)	Q.62.(4)	Q.63.(2)	Q.64.(1)	Q.65.(2)	Q.66.(2)	Q.67.(3)	Q.68.(3)	Q.69.(3)	Q.70.(5)
Q.71.(3)	Q.72.(3)	Q.73.(4)	Q.74.(5)	Q.75.(3)	Q.76.(4)	Q.77.(1)	Q.78.(2)	Q.79.(3)	Q.80.(5)
Q.81.(5)	Q.82.(1)	Q.83.(1)	Q.84.(1)	Q.85.(1)	Q.86.(2)	Q.87.(4)	Q.88.(2)	Q.89.(4)	Q.90.(4)
Q.91.(4)	Q.92.(1)	Q.93.(2)	Q.94.(4)	Q.95.(1)	Q.96.(4)	Q.97.(4)	Q.98.(4)	Q.99.(2)	Q.100.(2)
Q.101.(3)	Q.102.(3)	Q.103.(3)	Q.104.(1)	Q.105.(3)	Q.106.(2)	Q.107.(1)	Q.108.(2)	Q.109.(1)	Q.110.(1)
Q.111.(1)	Q.112.(1)	Q.113.(1)	Q.114.(3)	Q.115.(2)	Q.116.(2)	Q.117.(3)	Q.118.(1)	Q.119.(3)	Q.120.(1)
Q.121.(1)	Q.122.(1)	Q.123.(3)	Q.124.(1)	Q.125.(1)	Q.126.(2)	Q.127.(4)	Q.128.(1)	Q.129.(2)	Q.130.(2)
Q.131.(4)	Q.132.(1)	Q.133.(1)	Q.134.(3)	Q.135.(4)	Q.136.(2)	Q.137.(3)	Q.138.(2)	Q.139.(1)	Q.140.(2)
Q.141.(2)	Q.142.(2)	Q.143.(4)	Q.144.(1)	Q.145.(2)	Q.146.(4)	Q.147.(3)	Q.148.(3)	Q.149.(1)	Q.150.(4)



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ENGLISH

- Q.1.** A hot potato.
(a) A dish to relish when it is hot
(b) A very important person in a gathering
(c) An issue which is disputed, and catching the attention of people
(d) A way of thinking what someone is thinking
- Q.2.** You snooze, you lose.
(a) Don't take it lightly (b) Don't be over-enthusiastic
(c) Don't hesitate to do it (d) Don't be pessimistic
- Q.3.** I don't buy it.
(a) I don't believe it (b) I have no money
(c) I summarize it (d) I don't need it
- Q.4.** My two cents.
(a) My money (b) My opinion
(c) My decision (d) My explanation
- Q.5.** Out of the blue.
(a) Undoubtedly (b) Unexpectedly
(c) Unbelievably (d) Unconcerned
- Q.6.** What a small world.
(a) What a coincidence (b) What a challenging task
(c) What a narrow space (d) What a beautiful place
- Q.7.** Down the road.
(a) In future (b) In the past
(c) At present (d) No particular time
- Q.8.** Raising eyebrows.
(a) To show surprise (b) Criticize
(c) Support (d) Instruct
- Q.9.** Step up the plate.
(a) Take control (b) Take a job
(c) Take a responsibility (d) Take an opportunity
- Q.10.** The Holy Grail.
(a) The pious place of worship
(b) An important object or goal
(c) A very important place
(d) Someone's destination of life
- Q.11.** You scratch my back, I'll scratch yours.
(a) Mutual favour (b) Mutual understanding
(c) Mutual respect (d) Mutual disliking
- Q.12.** At the drop of a hat.
(a) Without any hesitation
(b) When attempt fails and it's time to start all over
(c) To further a loss with mockery
(d) Judging other's intentions too much
- Q.13.** Ball is in your court.
(a) Be happy at the dance / ball room
(b) It's up to you to make the decision
(c) A very powerful person
(d) Not speaking directly about an issue
- Q.14.** Best of both worlds.
(a) A happy person who is the best with all
(b) All the advantages
(c) To take on a task that is way too big
(d) Someone whom everybody likes
- Q.15.** Costs an arm and a leg.
(a) Severe punishment to someone
(b) Too much consciousness about one's body
(c) Two difficult alternatives
(d) Something very expensive

CLOZE COMPREHENSION - I

Directions :

Each of the following sentences in this section has a blank space with four words or group of words given. Select whichever word or group of words you consider most appropriate for the blank space and indicate your response on the Answer Sheet accordingly.

One of India's greatest musicians is M.S. Subbulakshmi, affectionately known to most people as M.S. Her singing has brought _____

Q.16. (a) sorrow / (b) joy / (c) boredom / (d) pain to millions of people not only _____ **Q.17.** (a) over / (b) on / (c) in / (d) with all parts of India, but in **Q.18.** (a) strange / (b) unknown / (c) other / (d) familiar countries around the world as well. _____

Q.19. (a) Within / (b) On / (c) In / (d) By October 1966 Subbulakshmi was invited to _____ **Q.20.** (a) dance / (b) sing / (c) speak / (d) enjoy in New York, where people of _____ **Q.21.** (a) many / (b) few / (c) backward / (d) all foreign countries listened to her music _____ **Q.22.** (a) attentively. / (b) quietly. / (c) indifferently. / (d) boldly. This was one of the greatest _____

Q.23. (a) awards / (b) honours / (c) prizes / (d) recognitions ever given to any musician. For _____ **Q.24.** (a) seconds / (b) minutes / (c) hours / (d) days together M.S. kept that international _____ **Q.25.** (a) spectator / (b) audience / (c) viewer / (d) businessmen spell-bound with the beauty of her voice and her style of singing.

CLOZE COMPREHENSION - II

The Second Anglo-Maratha War had shattered the _____ **Q.26.** (a) power / (b) dignity / (c) time / (d) patience of the Maratha chiefs, but not their spirit. The _____ **Q.27.** (a) disappearance / (b) empowerment / (c) loss / (d) disappointment of their freedom rankled in their hearts. They made a last _____ **Q.28.** (a) horrible / (b) desperate / (c) poor / (d) strong attempt to regain their independence and old _____ **Q.29.** (a) prestige in / (b) army / (c) rebellion / (d) infantry 1817. The lead in organizing a united front of the Maratha chiefs was taken by the Peshwa who was smarting under the **Q.30.** (a) pleasant / (b) satisfying / (c) rigid / (d) orthodox control exercised by the British Resident.

UPSC CDS (I)

SPOTTING ERRORS

Directions :

Each item in this section has a sentence with three underlined parts labelled (a), (b) and (c). Read each sentence to find out whether there is any error in any underlined part and indicate your response on the Answer Sheet against the corresponding letter i.e., (a) or (b) or (c). If you find no error, your response should be indicated as (d).

- Q.31.** The best way in which you can open the bottle is by putting it into hot water first. No error.
(a) (b) (c) (d)
- Q.32.** Somebody who I enjoy reading is Tagore. No error.
(a) (b) (c) (d)
- Q.33.** Electricity companies are working throughout days and nights to repair the damage. No error.
(a) (b) (c) (d)
- Q.34.** The students' test results were pleasant. No error.
(a) (b) (c) (d)
- Q.35.** Two thirds of the book were rubbish. No error.
(a) (b) (c) (d)
- Q.36.** You will be answerable for the court with any lies you have told. No error.
(a) (b) (c) (d)
- Q.37.** She felt terribly anxious for have to sing in front of such a large audience. No error.
(a) (b) (c) (d)
- Q.38.** I don't agree with smacking children if they do something wrong. No error.
(a) (b) (c) (d)
- Q.39.** The fruit can be made to jam. No error.
(a) (b) (c) (d)
- Q.40.** I asked him what he has done. No error.
(a) (b) (c) (d)
- Q.41.** There have been a tornado watch issued for Texas country until eleven O'clock tonight. No error.
(a) (b) (c) (d)
- Q.42.** Although the Red Cross accepts blood from the donors the nurses will not leave you give blood,
(a) (b)
if you have just had cold. No error.
(c) (d)
- Q.43.** A prism is used to refract white light so it spreads out in a continuous spectrum. No error.
(a) (b) (c) (d)
- Q.44.** Because of the movement of a glacier, the form of the Great Lakes was very slow. No error.
(a) (b) (c) (d)
- Q.45.** The new model costs twice more than last year's model. No error.
(a) (b) (c) (d)
- Q.46.** Gandhi ji always regretted for the fact that people gave him adulation while what he wanted
(a) (b)
was acceptance of his way of life. No error.
(c) (d)
- Q.47.** The party was ousted in power after twelve years. No error.
(a) (b) (c) (d)
- Q.48.** He was held in the prevention of Terrorism act. No error.
(a) (b) (c) (d)
- Q.49.** He has great fascination for each and every thing that are connected with drama. No error.
(a) (b) (c) (d)
- Q.50.** It's no secret that the President wants to have a second term of office. No error.
(a) (b) (c) (d)

COMPREHENSION

Directions :

In this section you have few short passages. After each passage, you will find some items based on the passage. First, read a passage and answer the items based on it. You are required to select your answers based on the contents of the passage and opinion of the author only.

Passage

Over-population is the most pressing of India's numerous and multi-faceted problems. In fact it has caused equally complex problems such as poverty, under-nourishment, unemployment and excessive fragmentation of land. Indisputably, this country has been facing a population explosion of crisis dimensions. It has largely diluted the fruits of the remarkable economic progress that the nation has made during the last four decades or so. The entire battle against poverty is thwarted by the rapid increase in the population. The tragedy is that while over-population accentuates poverty, the country's stark poverty itself is in many areas a major cause of over-population.

- Q.51.** What is the irony behind the over population of India?
 (a) Over-population gives birth to poverty, which (poverty) itself is the cause of over-population
 (b) Under nourishment and unemployment are outcomes of flawed economic progress
 (c) Fragmentation of land is leading to over-population
 (d) Fruits of the remarkable economic progress are trickling down to the poor
- Q.52.** What is the general tone of the passage ?
 (a) funny / humorous (b) sombre
 (c) didactic (d) tragic
- Q.53.** What, in the author's view, severely affects the economic growth of our country ?
 (a) poverty (b) illiteracy
 (c) over-population (d) None of the above
- Q.54.** What, according to the author, is the biggest reason behind over-population ?
 (a) under-nourishment
 (b) unemployment
 (c) excessive fragmentation of land
 (d) poverty
- Q.55.** "It has largely diluted the fruits of the remarkable economic progress". Find antonym of the underlined word.
 (a) coalesced (b) compounded
 (c) cheapened (d) consolidated

Passage

To eat and not be eaten - that's the imperative of a caterpillar's existence. The leaf roller reduces its risks of being picked off by predators by silking together a temporary shelter in which to feed and rest. Adopting a different line of defense, the jelly slug extrudes a sticky translucent coating that may foul the mouth-parts of marauding ants. For its part, the aquatic larva, by its watery element, fashions a portable hideout from fragments of aquatic leaves. Cutting a serpentine trail as it feeds on tender young leaves, the minute citrus leaf miner spends its entire larval life inside its

host plant, thus keeping its appetizing body safely under wraps.

- Q.56.** Which varieties of caterpillars 'build' shelters to protect themselves ?
 (a) Leaf roller and aquatic larva
 (b) Leaf roller and jelly slug
 (c) Jelly slug and aquatic larva
 (d) Jelly slug and citrus leaf miner
- Q.57.** Which one of the following caterpillars produces a sticky covering ?
 (a) Leaf roller (b) Jelly slug
 (c) Aquatic larva (d) Citrus leaf miner
- Q.58.** Which one of the following pairs of words in the passage describes enemies of the caterpillar ?
 (a) Serpentine and host (b) Predator and marauding
 (c) Serpentine and marauding (d) Predator and host
- Q.59.** Which one of the following makes itself unpalatable?
 (a) Leaf roller (b) Jelly slug
 (c) Aquatic larva (d) Leaf miner
- Q.60.** The main idea of the passage is that caterpillars
 (a) like to eat a lot
 (b) have to protect themselves while feeding
 (c) are good to eat
 (d) are not good to eat

Passage

I have always opposed the idea of dividing the world into the Orient and the Occident. It is, however, the tremendous industrial growth that has made the West what it is. I think the difference, say, between India and Europe in the 12th or 13th century would not have been very great. Differences have been intensified by this process of industrialization which has promoted material well-being tremendously and which is destroying the life of the mind, which is in a process of deterioration, chiefly because the environment that has been created by it does not give time or opportunity to individuals to think. If the life of the mind is not encouraged, then inevitably civilization collapses.

- Q.61.** The words "the Orient and the Occident" mean
 (a) the West and the East respectively
 (b) the East and the West respectively
 (c) the North and the South respectively
 (d) the South and the North respectively
- Q.62.** The author believes that the difference between India and Europe in the 12th or 13th century was not very great because
 (a) Indians and Europeans mixed freely
 (b) Indians imitated the European way of living
 (c) Europeans imitated the Indian way of living
 (d) Industrialization had not yet taken place
- Q.63.** In the opinion of the author, Industrialization is
 (a) an absolute blessing
 (b) an absolute curse
 (c) neither a blessing nor a curse
 (d) more of a curse than a blessing

UPSC CDS (I)

- Q.64.** The author says that the mental life of the world is in a process of deterioration because the modern generation is
- (a) endowed with low mental powers
 - (b) too lazy to exert its mental powers
 - (c) taught that physical activities are more important than mental
 - (d) brought up in an environment unfavourable to the growth of the mental life
- Q.65.** The title that best expresses the central idea of the passage is
- (a) difference between the Occident and the Orient
 - (b) impact of Industrialization on our civilization
 - (c) advantages of Industrialization
 - (d) disadvantages of Industrialization

Passage

In Delhi, it was forbidden by the law, at one time, to take a Dog into a public vehicle. One day a lady, accompanied by a pet dog, entered a bus. Wishing to evade the law, she placed her tiny dog in her dress pocket. It so happened that the person next to this lady was a pickpocket; and during the journey he carefully placed his hand into her pocket in search of her purse. Great was the horror to find instead a pair of sharp teeth inserted into his fingers. His exclamation of pain and surprise drew the attention of other passengers to him.

- Q.66.** Once the law in Delhi did not permit the people to
- (a) carry dogs into private vehicles
 - (b) board a bus without ticket
 - (c) carry dogs into a public vehicle
 - (d) carry animals with them
- Q.67.** In order to evade the law, the lady
- (a) hid the dog under the seat
 - (b) got off the bus
 - (c) gave the dog to a fellow passenger
 - (d) put the dog in her pocket
- Q.68.** The pick-pocket travelling with the lady
- (a) reported the matter to the conductor
 - (b) put his hand in her pocket
 - (c) took out the dog
 - (d) asked the lady to get off
- Q.69.** Which one of the following correctly expresses the meaning of "wishing to evade the law" ?
- (a) Wish to avoid following the law
 - (b) Desire to follow the law blindly
 - (c) Reluctance to break the law
 - (d) Wish to change the law
- Q.70.** Why did the pick-pocket exclaim with pain ?
- (a) He was hit by the lady
 - (b) He was caught by the fellow passengers
 - (c) He was bitten by the dog
 - (d) He fell off the bus

ORDERING OF SENTENCES

Directions :

In this section each item consists of six sentences of a passage. The first and sixth sentences are given in the beginning as S1 and S6. The middle four sentences in each have been jumbled up and labelled P, Q, R and S. You are required to find the proper sequence of the four sentences and mark your response accordingly on the Answer Sheet.

- Q.71.** S1 : First and foremost, there are order and safety in our civilization.
S6: Nobody may come and break into my house and steal my goods.
P : Thus in disputes between man and man, right has taken the place of might.
Q: If today I have a quarrel with another man, I do not get beaten merely because I am physically weaker.
R : I go to law, and the law will decide fairly between the two of us.
S : Moreover, the law protects me from robbery and violence.
The correct sequence should be
(a) R Q P S (b) S R Q P (c) Q R P S (d) P R S Q
- Q.72.** S1 : In democratic countries, men are equal before the law.
S6: And they live like this not for fun, but because they are too poor to afford another room.
P : While some few people live in luxury, many have not enough to eat, drink and wear.
Q: There are many families of five or six persons who live in a single room.
R : But the sharing-out of money - which means the sharing-out of food and clothing and houses - is still very unfair.
S : In this room they sleep and dress and wash and eat, and in this same room they die.
The correct sequence should be
(a) R P Q S (b) P R S Q (c) Q S P R (d) S P R Q
- Q.73.** S1 : Tomorrow it will be a year since we lost our great leader.
S6: Though he is no more with us, the qualities he possessed and the ideals he cherished remain with us.
P : To these he added a feminine sensitiveness to atmosphere.
Q : He was involved in the major events of his time.
R : He participated in them all while maintaining the highest standards of public conduct.
S : He was incomparably the greatest figure in our history - a man of dynamic force, intellectual power and profound vision.
The correct sequence should be
(a) P S R Q (b) R Q P S (c) R P Q S (d) S P Q R
- Q.74.** S1 : It would be possible to adduce many examples showing what could be done with the limited means at our ancestor's disposal in the way of making life comfortable.
S6: I hope, in this essay, to make that connection manifest.

P : What have comfort and cleanliness to do with politics, morals, and religion?

Q : But look more closely and you will discover that there exists the closest connection between the recent growth of comfort and the recent history of ideas.

R : They show that if they lived in filth and discomfort, it was because filth and discomfort fitted in with their principles, political, moral and religious.

S : At a first glance one would say that there could be no causal connection between arm chairs and democracies, sofas and the family system, hot baths and religious orthodoxy.

The correct sequence should be

(a) P R Q S (b) R P S Q (c) Q S R P (d) Q S P R

Q.75. S1 : To most people, the term technology conjures up images of mills or machines.

S6 : It includes ways to make chemical reactions occur, ways to breed fish, plant forests or teach history.

P : The classic symbol of technology is still the assembly line created by Henry Ford half a century ago.

Q : The invention of the horse collar in the Middle Ages led to changes in agricultural methods and was as such a technological advance.

R : Moreover, technology includes techniques, as well as the machines that may or may not be necessary to apply them.

S : This symbol, however, has always been inadequate, for technology has always been more than factories and machines.

The correct sequence should be

(a) S P R Q (b) P S Q R (c) R S P Q (d) Q S R P

Q.76. S1 : I was the secretary of the Philosophical Society of the Patna College.

S6 : I have been to Kolkata many times since, but never has it been more pleasant than that first visit.

P : It was my first visit to the city and its impression on my mind was indelible.

Q : In that capacity, I once led a trip to Kolkata.

R : I felt I had landed in the midst of beautiful dream world of a fairy land.

S : I saw the roads, the trams, the skyscrapers and the magnificent shops at the Chowranghee lane.

The correct sequence should be

(a) Q P S R (b) P S Q R (c) S R P Q (d) S Q R P

Q.77. S1 : Union finance ministry announced a series of concessions to trade and industry last month.

S6 : Manufacturers feel that prices of certain components may not be brought down because of the imposition of a 30 per cent duty where there was none earlier.

P : Together, these will result in a loss of revenue of Rs. 100 crore to the exchequer.

Q : Earlier, these were attracting customs duty varying from zero to 100 per cent.

R : The chunk of the relief of Rs. 60 crore has gone to the

electronics industry.

S : Raw materials and piece parts now carry customs duty of 30 per cent and 40 per cent ad valorem respectively.

The correct sequence should be

(a) R S Q P (b) P R S Q (c) S Q P R (d) Q P R S

Q.78. S1 : At four O'clock this morning, Hitler attacked and invaded Russia.

S6 : Under its cloak of false confidence, the German armies drew up in immense strength along a line which stretches from the White Sea to the Black Sea.

P : No complaint had been made by Germany of its non-fulfilment.

Q : All his usual formalities of perfidy were observed with scrupulous technique.

R : No one could have expected that Hitler would do it.

S : A non-aggression treaty had been solemnly signed and was in force between the two countries.

The correct sequence should be

(a) R Q S P (b) R S Q P (c) P S Q R (d) Q P S R

Q.79. S1 : Roderick Usher has always been a quiet person who talked little of himself.

S6 : In the part of the country where he lived, the "House of Usher" had come to mean both the family and its ancestral mansion.

P : Many of his ancestors had been famous for their artistic and musical abilities.

Q : Others were known for their exceptional generosity and charity.

R : Yet I did know that his family was an old one.

S : So I did not know too much about him.

The correct sequence should be

(a) P Q R S (b) S R Q P (c) S P R Q (d) S R P Q

Q.80. S1 : Mass production has increased the tendency to view things as useful rather than delightful.

S6 : Indeed a lowering of quality usually results when mass production is substituted for more primitive methods.

P : These various things share nothing with the buttons except money value.

Q : All the rest you wish to exchange for food, shelter, and many other things.

R : Suppose you are a manufacturer of buttons : however excellent your buttons may be, you do not want more than a few for your own use.

S : And it is not even the money value of the buttons that is important to you : what is important is profit which may be increased by lowering their quality.

The correct sequence should be

(a) P Q R S (b) R Q P S (c) S P Q R (d) Q R P S

ANTONYMS

Directions :

Each item in this section consists of a sentence with an underlined word/words followed by four words. Select the option that is opposite in meaning to the underlined word/

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words and mark your response on your Answer Sheet accordingly.

- Q.81.** It was a mystery as to where the young girl had acquired such a naïve belief.
(a) credulous (b) childlike (c) wise (d) innocent
- Q.82.** It's the only treatment suitable for cancer.
(a) insufficient (b) impertinent
(c) befitting (d) congenial
- Q.83.** Some of the criticisms which they had to put up were very unfair.
(a) scold (b) scorn
(c) appreciation (d) censure
- Q.84.** I would beg of all friends not to rush to Birla house nor try to dissuade me or be anxious about me.
(a) certain (b) composed (c) careless (d) heedless
- Q.85.** It could not have been expected that, with such a bent of mind of the people, there should have been much activity for the cultivation of the physical sciences in this part of the world.
(a) dull (b) dormant (c) indolence (d) idle
- Q.86.** Indian culture has been, from time immemorial, of a peculiar cast and mould.
(a) common (b) customary (c) natural (d) familiar
- Q.87.** The princess charming was the centre of attraction today.
(a) enchanting (b) hypnotic (c) repulsive (d) fascinating
- Q.88.** Macbeth is a/an abominable figure.
(a) abhorrent (b) repugnant (c) reputable (d) attractive
- Q.89.** Terrorists profess fanatical ideology.
(a) bigoted (b) militant (c) moderate (d) fervid
- Q.90.** Rakesh is vulnerable to political pressure.
(a) weak (b) unguarded (c) exposed (d) resilient

FILL IN THE BLANK

Directions :

Each of the following sentences in this section has a blank space and four words or group of words given after the sentence. Select the word or group of words you consider most appropriate for the blank space and indicate your response on the Answer Sheet accordingly.

- Q.91.** In the face of the overwhelming mass of evidence against him, we cannot _____ him of the crime.
(a) punish (b) absolve (c) release (d) ignore
- Q.92.** I hope that the rain will _____ our picnic tomorrow.
(a) keep off (b) put off (c) set back (d) stay out
- Q.93.** After the marathon, some of the competitors felt completely _____
(a) cut up (b) done in (c) done out (d) run out
- Q.94.** Scarcely _____ the teacher entered the class when he heard the noise.
(a) did (b) has (c) had (d) will have
- Q.95.** I do not think he will ever _____ the shock of his wife's death.
(a) get by (b) get off (c) get through (d) get over

- Q.96.** It is no use in crying over _____.
(a) spoiled milk (b) spirited milk
(c) split milk (d) spilt milk
- Q.97.** You must go to the station now, your brother _____ go just yet as his train leaves after three hours.
(a) shouldn't (b) mustn't (c) wouldn't (d) needn't
- Q.98.** Every rash driver becomes a _____ killer.
(a) sure (b) reckless (c) potential (d) powerful
- Q.99.** The country owes a deep debt of _____ for the freedom fighters.
(a) patriotism (b) sincerity
(c) remembrance (d) gratitude
- Q.100.** The whole lot of young men was very enthusiastic but your friend alone was _____.
(a) quarrelsome (b) complaining
(c) a wet blanket (d) sleepy

SYNONYMS

Directions :

Each item in this section consists of a sentence with an underlined word/words followed by four words. Select the option that is nearest in meaning to the underlined word/words and mark your response on your Answer Sheet accordingly.

- Q.101.** A truly respectable old man is a ripe person.
(a) senior (b) mature (c) perfect (d) seasoned
- Q.102.** The soldiers repulsed the enemy.
(a) defeated (b) destroyed (c) rejected (d) repelled
- Q.103.** She deftly masked her feelings.
(a) hid (b) flaunted (c) oblique (d) obscured
- Q.104.** Vendors must have licence.
(a) One who drives a car
(b) One who works in a hospital
(c) One who is employed in food serving
(d) One engaged in selling
- Q.105.** They will not admit children under fourteen.
(a) avow (b) receive (c) accept (d) concede
- Q.106.** The jewels have been stolen from her bedroom.
(a) embezzled (b) asserted (c) yielded (d) abdicated
- Q.107.** The soldier showed an exemplary courage.
(a) flawed (b) faulty (c) ideal (d) boisterous
- Q.108.** They served fruits after the dinner.
(a) assisted (b) obliged (c) waited (d) offered
- Q.109.** The committee should recommend his name to the government.
(a) praise (b) advise (c) counsel (d) suggest
- Q.110.** Can medicines save us from death ?
(a) hide (b) rescue (c) protect (d) liberate

Directions :

[illegible]

Q.112. dress fashions changed and light cotton of the English textiles began to replace the coarse woollens

Q.113. put pressure on their government Indian goods in England the British manufacturers to restrict and prohibit

Q.114. however still held their own in foreign markets in spite of these laws Indian silk and cotton textiles

P O R S

Q.115. _____ and it led to rapid economic development _____ the Industrial Revolution _____ transformed the British

The correct sequence should be : (a) S P R O (b) O P R S (c) O R S P (d) S R P O

P	Q	R
one of the greatest poets of modern India		

The correct sequence should be : (a) Q R S P (b) S R Q P (c) S R P Q (d) S P R Q

Q.117. to accept any of the important disillusionment demands of the nationalists produced

the failure of the British government

Q.118. showed that a backward the rise of modern Japan after 1868

The correct sequence should be : (a) P O R S (b) S R O P (c) P R O S (d) O R P S

P	Q
on rituals, ceremonies and superstitions.	Vivekananda condemned the caste system

Q 120. The correct sequence should be : (a) P Q R S (b) S P R Q (c) S P Q R (d) R P S Q
Mr. John, who was hardly six months old, Charles, as his son, adopted

The correct sequence should be : (a) S Q R P (b) P S Q R (c) R S P Q (d) P R S Q

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GENERAL KNOWLEDGE

Directions :

The following **seven (7)** items consist of two statements, Statement I and Statement II. Examine these two statements carefully and select the correct answer using the code given below.

Code :

- (a) Both the statements are individually true and Statement II is the correct explanation of Statement I
- (b) Both the statements are individually true but Statement II is **not** the correct explanation of Statement I
- (c) Statement I is true but Statement II is false
- (d) Statement I is false but Statement II is true

Q.1. Statement I:

By far the most common topographic form in a Karst terrain is the sinkhole.

Statement II:

Topographically, a sinkhole is a depression that varies in depth from less than a meter to few hundred meters.

Q.2. Statement I:

Incised meanders are formed in the mature stage of a river.

Statement II :

Incised meanders are characterized by rejuvenation and upliftment of land.

Q.3. Statement I:

Portions of glacial troughs may exhibit remarkably flat floors.

Statement II :

The flat floor in a glacial trough is produced by uniform glacial erosion.

Q.4. Statement I:

In Tundra climate, biodiversity comparatively less.

Statement II :

Tundra climate has less reproductive warm period.

Q.5. Statement I:

Tides are the rise and fall of sea levels caused by the combined effects of the gravitational forces exerted by the Moon and the Sun and the rotation of the Earth.

Statement II :

The Earth rotates from west to east.

Q.6. Statement I:

A person may suffer from tuberculosis if she/he frequently visits crowded place.

Statement II :

Bacteria of tuberculosis spread through droplets by sneezing or coughing.

Q.7. Statement I:

Bioaccumulation is a process of progressive accumulation of heavy metals and pesticides in an organism.

Statement II :

Large fishes of the pond are found to have higher concentration of pesticides than planktons of the same pond.

Q.8. Which one of the following is a true fish as per the biological system of classification?

- (a) Silverfish (b) Jellyfish
- (c) Cuttlefish (d) Flying fish

Q.9. In which one of the following types of connective tissues in animals does fat get stored?

- (a) Adipocyte (b) Chondrocyte
- (c) Osteocyte (d) Reticulocyte

Q.10. Which one of the following pairs about organ/part that helps in locomotion is **not** correctly matched?

- (a) Euglena : Flagellum
- (b) Paramecium : Cilia
- (c) Nereis : Pseudopodia
- (d) Starfish : Tubefeet

Q.11. Lysosome is formed from which of the following cell organelles?

- (a) Nucleus (b) Endoplasmic reticulum
- (c) Golgi bodies (d) Ribosomes

Q.12. A protein is synthesized in the endoplasmic reticulum bound ribosomes and it targets to the inner thylakoid space of chloroplast. How many double-layered membrane layers it has to pass to reach its destination?

- (a) 2 (b) 3 (c) 4 (d) 5

Q.13. Which of the following causes adiabatic temperature changes in atmosphere?

- (a) Deflection and advection
- (b) Latent heat of condensation
- (c) Expansion and compression of the air
- (d) Partial absorption of solar radiation by the atmosphere

Q.14. Which one of the following is applicable to collision-coalescence process of precipitation?

- (a) Clouds which do not extend beyond the freezing level
- (b) Clouds which extend beyond the freezing level
- (c) All types of clouds
- (d) Cirrocumulus cloud

Q.15. Which one of the following places of India experiences highest atmospheric pressure during winter?

- (a) Jaisalmer (b) Leh
- (c) Chennai (d) Guwahati

Q.16. Match List-I with List-II and select the correct answer using the code given below the Lists :

List-I

List-II

(Hypothesis/Theory) (Propounder)

- A. Planetsimal hypothesis 1. Kober
- B. Thermal contraction theory 2. Chamberlin
- C. Geosynclinal Orogen theory 3. Daly
- D. Hypothesis of sliding 4. Jeffreys

Code :

- | | | | |
|-------|---|---|---|
| (a) A | B | C | D |
| 2 | 4 | 1 | 3 |
| (b) A | B | C | D |
| 2 | 1 | 4 | 3 |
| (c) A | B | C | D |
| 3 | 1 | 4 | 2 |
| (d) A | B | C | D |
| 3 | 4 | 1 | 2 |

Q.17. Bright light is found to emit from photographer's flashgun. This brightness is due to the presence of which one of the following noble gases?

- (a) Argon (b) Xenon
(c) Neon (d) Helium

Q.18. Which one of the following is not a characteristic of a compound?

- (a) Composition is variable.
(b) All particles of compound are of only one type.
(c) Particles of compound have two or more elements.
(d) Its constituents cannot be separated by simple physical methods.

Q.19. Which of the following substances cause temporary hardness in water?

1. $\text{Mg}(\text{HCO}_3)_2$ 2. $\text{Ca}(\text{HCO}_3)_2$
3. CaCl_2 4. MgSO_4

Select the correct answer using the code given below.

- (a) 3 and 4 (b) 2 and 3 (c) 1 and 4 (d) 1 and 2

Q.20. Which one of the following elements will be an isobar of calcium if the atomic number of calcium is 20 and its mass number is 40?

- (a) Element with 20 protons and 18 neutrons
(b) Element with 18 protons and 19 neutrons
(c) Element with 20 protons and 19 neutrons
(d) Element with 18 protons and 22 neutrons

Q.21. Which of the following represents a relation for 'heat lost = heat gained'?

- (a) Principle of thermal equilibrium
(b) Principle of colors
(c) Principle of calorimetry
(d) Principle of vaporization

Q.22. Two metallic wires made from copper have same length but the radius of wire 1 is half of that of wire 2. The resistance of wire 1 is R. If both the wires are joined together in series, the total resistance becomes

- (a) $2R$ (b) $\frac{R}{2}$ (c) $\frac{5}{4}R$ (d) $\frac{3}{4}R$

Q.23. When the Sun is near the horizon during the morning or evening, it appears reddish. The phenomenon that is responsible for this observation is

- (a) reflection of light (b) refraction of light
(c) dispersion of light (d) scattering of light

Q.24. Match List-I with List-II and select the correct answer using the code given below the Lists :

List	List-II
(Cloud)	(Characteristic)
A. Cirrus	1. Rain-giving
B. Stratus	2. Feathery appearance
C. Nimbus	3. Vertically growing
D. Cumulus	4. Horizontally spreading

Code :

- | | | | |
|-------|---|---|---|
| (a) A | B | C | D |
| 3 | 1 | 4 | 2 |
| (b) A | B | C | D |
| 2 | 1 | 4 | 3 |
| (c) A | B | C | D |
| 2 | 4 | 1 | 3 |
| (d) A | B | C | D |
| 3 | 4 | 1 | 2 |

Q.25. Which one of the following is not an exclusive right of the concerned coastal nations over Exclusive Economic Zone (EEZ)?

- (a) Survey and exploitation of mineral resources of ocean deposits
(b) Exploitation of marine water energy and marine organisms including fishing
(c) Conservation and management of marine resources
(d) Navigation of ships and laying down submarine cables

Q.26. In which one of the following groups of States in India is the Integrated Coastal Zone Management (ICZM) Project being implemented as a pilot investment?

- (a) Gujarat, Kerala and Goa
(b) Kerala, Karnataka and Andhra Pradesh
(c) Gujarat, Odisha and West Bengal
(d) Maharashtra, Andhra Pradesh and Tamil Nadu

Q.27. Which of the following statements about the National Water Academy (NWA) is/are correct?

1. The primary objective of the NWA is to function as Centre of Excellence in training for in-service engineers from Central and State organizations on various aspects of water resource planning.
2. The NWA is located in New Delhi.

Select the correct answer using the code given below.

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 or 2

Q.28. A wire of copper having length l and area of cross-section A is taken and a current I is flown through it. The power dissipated in the wire is P. If we take an aluminium wire having same dimensions and pass the same current through it, the power dissipated will be

- (a) P (b) $<P$ (c) $>P$ (d) $2P$

Q.29. The pressure of a fluid varies with depth h as $P = P_0 + \rho gh$ where ρ is the fluid density. This expression is associated with

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- (a) Pascal's law (b) Newton's law
(c) Bernoulli's principle (d) Archimedes' principle

Q.30. Consider the following constituent gases of the atmosphere :

1. Argon 2. Neon 3. Helium 4. Carbon dioxide

Which one of the following is the correct ascending sequence of the above gases in terms of the volume percentage?

- (a) 1-3-2-4 (b) 1-4-2-3 (c) 4-2-3-1 (d) 2-4-1-3

Q.31. Which one of the following Indian States has the highest percentage of Scheduled Tribe population to its total population?

- (a) Mizoram (b) Nagaland
(c) Meghalaya (d) Arunachal Pradesh

Q.32. Extrusive volcanoes are not found in which one of the following mountains?

- (a) Alaska (b) Rocky (c) Andes (d) Himalayas

Q.33. Which one of the following crops is not cultivated in Karewas, the lacustrine deposits of sand, clay, loam, silt and boulders?

- (a) Saffron (b) Almond (c) Walnut (d) Ling nut

Q.34. Consider the following tributaries of river Ganga :

1. Gandak 2. Kosi 3. Ghaghara 4. Gomti

Which one of the following is the correct order of the above rivers from east to west?

- (a) 3-4-1-2 (b) 2-1-3-4 (c) 2-3-1-4 (d) 1-2-4-3

Q.35. Which one of the following statements about 'Niryat Bandhu Scheme' is correct?

- (a) It is a scheme for mentoring first generation entrepreneurs.
(b) It is a scheme for crop protection.
(c) It is a scheme for the vulnerable section of the society.
(d) It is a scheme for monitoring rural poor.

Q.36. Which one of the following statements about the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is **not** correct?

- (a) It is a placement-linked skill training programme exclusively for rural girls.
(b) It aims to convert India's demographic surplus into a demographic dividend.
(c) The scheme aims to benefit more than 55 million poor rural folk.
(d) It is a generational poverty alleviation programme.

Q.37. Where is Hambantota Port located?

- (a) Iran (b) Sri Lanka (c) Japan (d) Pakistan

Q.38. The projects under Coastal Berth Scheme of the flagship Sagarmala Programme are distributed over how many States?

- (a) Eight (b) Ten (c) Twelve (d) Fourteen

Q.39. Which one of the following statements about the National Adaptation Fund for Climate Change is **not** correct?

- (a) The fund is meant to assist national and State level activities to meet the cost of adaptation measures.

(b) This scheme has been taken as a Central Sector Scheme.

(c) The Indian Council of Agricultural Research is the national implementing entity for the fund.

(d) The scheme has been in force since 2015-2016.

Q.40. SAMPRITI-2017' is a joint military exercise between armed forces of India and

- (a) Bhutan (b) Bangladesh
(c) Pakistan (d) Myanmar

Q.41. The judgement of the Supreme Court of India in the Vishakha Case pertains to

- (a) sexual harassment in the work place
(b) Sati
(c) dowry death
(d) rape

Q.42. The first BRICS Summit, after the inclusion of South Africa, was held at

- (a) Brasilia (b) Sanya
(c) Yekaterinburg (d) Durban

Q.43. Who deciphered the Brahmi and Kharoshthi scripts?

- (a) Piyadassi
(b) Colin Mackenzie
(c) Alexander Cunningham
(d) James Prinsep

Q.44. Which of the following is/are the feature(s) of the Brahmadeya Grants during c 600-1200 AD?

1. Their creation meant a renunciation of actual or potential sources of revenue by the State.
2. These grants could vary from a Small plot to several villages.
3. Most grants were made in unsettled areas.

Select the correct answer using the code given below.

- (a) 1 only (b) 2 and 3 only
(c) 1 and 2 only (d) 1, 2 and 3

Q.45. Who is the author of Manimekalai?

- (a) Kovalan (b) Sathanar
(c) Ilango Adigal (d) Tirutakkatevar

Q.46. Which one of the following statements about the Elephanta Island is correct?

- (a) It was given its name by the British after a large elephant structure located there.
(b) It contains one large cave.
(c) It is well-known for a spectacular carving of Vishnu described in the Vishnudharmottara Purana.
(d) It is associated with the Pashupata sect.

Q.47. Which of the following statements about Sir Syed Ahmad Khan is/are correct?

1. He argued that India was a federation of ethnic communities based on common descent.
2. His philosophy was very similar to that of the Indian National Congress.

3. He imagined India as a Nation State based on individual citizen's rights.
4. The curriculum at the Mohammedan Anglo-Oriental College blended Muslim theology and European empiricism.

Select the correct answer using the code given below.

- (a) 1 only (b) 2 and 3 (c) 3 only (d) 1 and 4

Q.48. Consider the following statements about impact of tax :

1. A tax is shifted forward to Consumers if the demand is inelastic relative to supply.
2. A tax is shifted backward to producers if the supply is relatively more inelastic than demand.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.49. According to the law of diminishing marginal utility, as the amount of a good consumed increases, the marginal utility of that good tends to

- (a) improve (b) diminish
(c) remain constant (d) first diminish and then improve

Q.50. eBiz is one of the integrated services projects and part of the 31 Mission Mode Projects (MMPs) under the National e-Governance Plan of the Government of India. eBiz is being implemented under the guidance and aegis of the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry by

- (a) Tata Consultancy Services
(b) Infosys Technologies Limited
(c) Wipro
(d) HCL Technologies

Q.51. Which of the following statements about the olive ridley turtles is/are correct?

1. They are the smallest and most abundant of all sea turtles found in the world.
2. They live in warm waters of Pacific, Atlantic and Indian Oceans.
3. The Coromandel Coast in India is the largest mass nesting site for the olive ridley turtles.

Select the correct answer using the code given below.

- (a) 1, 2 and 3 (b) 1 and 2 only
(c) 2 and 3 only (d) 1 only

Q.52. Consider the following statement :

"A sound body means one which bends itself to the spirit and is always a ready instrument at its service."

The above statement is attributed to

- (a) Sardar Patel (b) Winston Churchill
(c) Mahatma Gandhi (d) Baden-Powell

Q.53. Who among the following was the founder of Phoenix Settlement?

- (a) Mahatma Gandhi (b) B. R. Ambedkar
(c) Rabindranath Tagore (d) Swami Vivekananda

Q.54. Name the platform used for ritual purposes by the kings of the Vijayanagara Empire.

- (a) Mahanavami Dibba (b) Lotus Mahal
(c) Hazara Rama (d) Virupaksha

Q.55. The idea of "Farr-i Izadi", on which the Mughal kingship was based, was first developed by which one of the following Sufi saints

- (a) Shihabuddin Suhrawardi
(b) Nizamuddin Auliya
(c) Ibn al-Arabi
(d) Bayazid Bistami

Q.56. Which Buddhist text contains an account of the Mauryan Emperor Ashoka?

- (a) Vinaya Pitaka (b) Sutta Pitaka
(c) Abhidhamma Pitaka (d) Mahavamsa

Q.57. Which one of the following statements about Buddhist Stupas in India is not correct?

- (a) Ashoka played an important role in popularizing the Stupa cult.
(b) They were repositories of relics of Buddha and other monks.
(c) They were located in rural areas.
(d) They were located close to trade routes.

Q.58. Which one among the following States of India has the largest number of seats in its Legislative Assembly?

- (a) West Bengal (b) Bihar
(c) Madhya Pradesh (d) Tamil Nadu

Q.59. Which of the following statements about the Ordinance-making power of the Governor is/are correct?

1. It is a discretionary power.
2. The Governor himself is not competent to withdraw the Ordinance at any time.

Select the correct answer using the code given below.

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.60. Which one of the following events is not correctly matched with the year in which it happened?

- (a) Inauguration of the SWIFT system of electronic interbank fund transfers worldwide—1985
(b) Conclusion of the Uruguay Round of GATT—1994
(c) Inauguration of the World Trade Organization—1995
(d) Establishment of the first wholly electronic stock exchange (Nasdaq)—1971

Q.61. Consider the following statements about Indo-Tibetan Border Police (ITBP) :

1. ITBP was raised in 1962.
2. ITBP is basically a mountain trained force.
3. ITBP replaced Assam Rifles in Sikkim and Arunachal Pradesh in 2004-2005 for border guarding duty.
4. ITBP presently has 52 service battalions.

Which of the statements given above are correct?

- (a) 1, 2 and 4 only (b) 3 and 4 only
(c) 1, 2, 3 and 4 (d) 1, 2 and 3 only

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Q.62. Which one of the following is not an International Human Rights Treaty?

- (a) International Covenant on Civil and Political Rights
- (b) Convention on the Elimination of All Forms of Discrimination against Women
- (c) Convention on the Rights of Persons with Disabilities
- (d) Declaration on the Right to Development

Q.63. In the context of elections in India, which one of the following is the correct full form of VVPAT?

- (a) Voter Verifiable Poll Audit Trail
- (b) Voter Verifying Paper Audit Trail
- (c) Voter Verifiable Paper Audit Trail
- (d) Voter Verifiable Paper Account Trail

Q.64. Which one of the following is not an objective of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)?

- (a) To achieve convergence of investment in irrigation at the field level
- (b) To expand cultivable area under irrigation
- (c) To improve on-farm water use efficiency to reduce wastage of
- (d) To protect farmers against crop failure due to natural calamities

Q.65. Which of the following National Parks of India are declared as World Heritage by UNESCO?

1. Keoladeo National Park
2. Sundarbans National Park
3. Kaziranga National Park
4. Ranthambore National Park

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1, 2 and 3 only
- (c) 3 and 4 only
- (d) 1, 2, 3 and 4

Q.66. Match List-I with List-II and select the correct answer using the code given below the Lists :

List-I	List-II
(Railway Zone)	(Headquarters)
A. North Central	1. Secunderabad
B. North Eastern	2. Jabalpur
C. West Central	3. Gorakhpur
D. South Central	4. Allahabad

Code :

- (a) A B C D
- 3 1 4 2
- (b) A B C D
- 2 1 4 3
- (c) A B C D
- 2 4 1 3
- (d) A B C D
- 3 4 1 2

Q.67. Which one of the following statements about lymph is correct?

- (a) Lymph is formed due to leakage of blood through capillaries.
- (b) Lymph contains blood cells such as RBC.
- (c) Lymph is also circulated by the blood circulating heart.
- (d) Lymph only transports hormones.

Q.68. Which of the following classes of animals has/have three-chambered heart?

- (a) Pisces and Amphibia
- (b) Amphibia and Reptilia
- (c) Reptilia only
- (d) Amphibia only

Q.69. Accumulation of which one of the following in the muscles of sprinters leads to cramp?

- (a) Lactic acid
- (b) Ethanol
- (c) Pyruvic acid
- (d) Glucose

Q.70. Which one of the following statements about Exchange-Traded Fund (ETF) is not correct?

- (a) It is a marketable security.
- (b) It experiences price changes throughout the day.
- (c) It typically has lower daily liquidity and higher fees than mutual fund shares.
- (d) An ETF does not have its net asset value calculated once at the end of every day.

Q.71. Which one of the following is the maximum age of joining National Pension System (NPS) under the NPS Private Sector?

- (a) 55 years
- (b) 60 years
- (c) 65 years
- (d) 70 years

Q.72. The Reserve Bank of India has recently constituted a high-level task force on Public Credit Registry (PCR) to suggest a road map for developing a transparent, comprehensive and near-real-time PCR for India. The task force is headed by

- (a) Sekar Karnam
- (b) Vishakha Mulye
- (c) Sriram Kalyanaraman
- (d) Y. M. Deosthalee

Q.73. In October 2017, India sent its first shipment of wheat to Afghanistan as a part of commitment made by the Government of India to supply 1:1 million tonnes of wheat to that country on grant basis. The shipment was sent through

- (a) Iran
- (b) Pakistan
- (c) Tajikistan
- (d) China

Q.74. Which of the following statements about the India Post Payments Bank (IPPB) is/are correct?

1. It has been incorporated as a Public Limited Company.
2. It started its operation by establishing two pilot branches at Hyderabad and Varanasi.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q.75. Which of the following are the functions of the National Human Rights Commission (NHRC)?

1. Inquiry at its own initiative on the violation of human rights
2. Inquiry on a petition presented to it by a victim
3. Visit to jails to study the condition of the inmates
4. Undertaking and promoting research in the field of human rights.

Select the correct answer using the code given below.

- (a) 1 and 2 only (b) 2, 3 and 4 only
(c) 1, 3 and 4 only (d) 1, 2, 3 and 4

- Q.76.** A person is disqualified for being chosen as, and for being, a Member of either House of the Parliament if the person
- holds any office of profit under the Government of India or the Government of any State other than an office declared by the Parliament by law not to disqualify its holder
 - is an undischarged insolvent
 - is so disqualified under the Tenth Schedule of the Constitution of India
 - is of unsound mind and stands so declared by a competent Court

Select the correct answer using the code given below.

- (a) 1, 2 and 4 only (b) 1, 2, 3 and 4
(c) 3 and 4 only (d) 1, 2 and 3 only

- Q.77.** According to the Election Commission of India, in order to be recognized as a 'National Party', a political party must be treated as a recognized political party in how many States?

- (a) At least two States (b) At least three States
(c) At least four States (d) At least five States

- Q.78.** Which one of the following statements with regard to Antrix Corporation Limited is correct?

- It is a commercial arm of the Department of Industrial Policy and Promotion.
- It is under the administrative control of the Department of Space.
- It is under the administrative control of the Ministry of Health and Family Welfare.
- It is a commercial arm of the Department of Science and Technology.

- Q.79.** Verses ascribed to poet-saint Kabir have been compiled in which of the following traditions?

- Bijak in Varanasi
- Kabir Granthavali in Rajasthan
- Adi Granth Sahib

Select the correct answer using the code given below.

- (a) 1 and 2 only (b) 1, 2 and 3
(c) 2 and 3 only (d) 3 only

- Q.80.** Which one of the following elements is used as a timekeeper in atomic clocks?

- (a) Potassium (b) Caesium
(c) Calcium (d) Magnesium

- Q.81.** Which one of the following elements is involved in the control of water content of the blood?

- (a) Potassium (b) Lithium
(c) Rubidium (d) Caesium

- Q.82.** Which one of the following gases dissolves in water to give acidic solution?

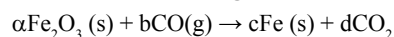
- (a) Carbon dioxide (b) Oxygen

- (c) Nitrogen (d) Hydrogen

- Q.83.** Which one of the following elements is essential for the formation of chlorophyll in green plants?

- (a) Calcium (b) Iron
(c) Magnesium (d) Potassium

- Q.84.** Consider the following chemical reaction :



In the balanced chemical equation of the above, which of the following will be the values of the coefficients a, b, c and d respectively?

- (a) 3, 2, 3, 1 (b) 1, 3, 2, 3 (c) 2, 3, 3, 1 (d) 3, 3, 2, 1

- Q.85.** Why is argon gas used along with tungsten wire in an electric bulb?

- To increase the life of the bulb
- To reduce the consumption of electricity
- To make the emitted light colored
- To reduce the cost of the bulb

- Q.86.** Which one of the following is the correct relation between the Kelvin temperature (T) and the Celsius temperature (t_c)?

- These are two independent temperature scales
- $T = t_c$
- $T = t_c - 273.15$
- $T = t_c + 273.15$

- Q.87.** Sound waves **cannot** travel through a

- copper wire placed in air
- silver slab placed in air
- glass prism placed in water
- Wooden hollow pipe placed in vacuum

- Q.88.** Which one of the following is the value of one nanometer?

- (a) 10^{-7} cm (b) 10^{-6} cm (c) 10^{-4} cm (d) 10^{-3} cm

- Q.89.** Consider the following statements :

- There is no net moment on a body which is in equilibrium.
- The momentum of a body is always conserved.
- The kinetic energy of an object is always conserved.

Which of the statements given above is/are correct?

- (a) 1, 2 and 3 (b) 2 and 3 only
(c) 1 and 2 only (d) 1 only

- Q.90.** Working of safety fuses depends upon

- magnetic effect of the current
- chemical effect of the current
- magnitude of the current
- heating effect of the current

Select the correct answer using the code given below.

- (a) 1, 2, 3 and 4 (b) 1, 2 and 3 only
(c) 3 and 4 only (d) 4 only

- Q.91.** In November 2017, India's MC Mary Kom won the gold medal at the Asian Boxing Championship, 2017 held at Ho Chi Minh City in Vietnam. In which one of the following categories was she declared winner?

- (a) 48 kg (b) 51 kg (c) 54 kg (d) 57 kg

UPSC CDS (I)

Q.92. Which one of the following is the theme of the World Soil Day, 2017?

- (a) Soils and pulses, a symbol for life
- (b) Caring for the Planet starts from the Ground
- (c) Soils, a solid ground for life
- (d) Soils, foundation for family farming

Q.93. Who among the following is the winner of the National Badminton Championship (Men), 2017?

- (a) Kidambi Srikanth (b) H. S. Prannoy
- (c) Ajay Jayaram (d) Sai Praneeth

Q.94. Which of the following statements about the usage of the term "barbarian" is/are Correct?

- 1. It is derived from the Greek word 'barbaros' which means a non-Greek.
- 2. Romans used the term for the Germanic tribes, the Gauls and the Huns.

Select the correct answer using the code given below.

- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2

Q.95. Which one of the following statements is not correct?

- (a) Al-Biruni identifies the Sufi doctrine of divine love as selfannihilation with parallel passages from Bhagavad Gita.
- (b) According to Al-Biruni, Sufi theories of Soul were similar to those in Patanjali's Yoga Sutra.
- (c) The Hatha Yogic treatise Amrita Kunda had lasting impact on Sufism.
- (d) Hujwiri's conversation with the Yogis shows that he was impressed with their theory of the division of the human body.

Q.96. Consider the following statement :

"So much is wrong from the peasants, that even dry bread is scarcely left to fill their stomachs."

Who among the following European travellers had made the above statement about the condition of peasantry in the Mughal Empire?

- (a) Francisco Pelsaert (b) Francois Bernier
- (c) Jean-Baptiste Tavernier (d) Niccolao Manucci

Q.97. What is the name of the literary genre developed by the Khojas who are a branch of the Ismaili sect?

- (a) Ginan (b) Ziyarat (c) Raag (d) Shahada

Q.98. Who was / were the 10th century composer(s) of the Nalayira Divya Prabandham?

- (a) Alvares (b) Nayanars (c) Appar (d) Sambandar

Q.99. Which one of the following is not a correct ascending order of commissioned Tanks in the defence forces of India?

- (a) Lieutenant, Captain, Major, Lieutenant Colonel, Colonel, Brigadier, Major General, Lieutenant General, General
- (b) Flying Officer, Flight Lieutenant, Squadron Leader, Wing Commander, Group Captain, Air Commodore, Air Vice Marshal, Air Marshal, Air Chief Marshal

- (c) Flying Officer, Flight Lieutenant, Squadron Leader, Group Captain, Wing Commander, Air Commodore, Air Vice Marshal, Air Marshal, Air Chief Marshal
- (d) Sub Lieutenant, Lieutenant, Lieutenant Commander, Commander, Captain, Commodore, Rear Admiral, Vice Admiral, Admiral

Q.100. Which of the following statements about Attorney General of India is/are not correct?

- 1. He is the first Law Officer of the Government of India.
- 2. He is entitled to the privileges of a Member of the Parliament.
- 3. He is a whole-time counsel for the Government.
- 4. He must have the same qualifications as are required to be a judge of the Supreme Court.

Select the correct answer using the code given below.

- (a) 1, 2 and 3 (b) 2 and 4
- (c) 3 only (d) 1 only

Q.101. Under which one of the following Amendment Acts was Sikkim admitted into the Union of India?

- (a) 35th (b) 36th (c) 37th (d) 38th

Q.102. Which one of the following became a part of China in 1997 following the principle of one country, two systems?

- (a) Tibet (b) Hong Kong
- (c) Xinjiang (d) Inner Mongolia

Q.103. Which one of the following statements in respect of the States of India is not correct?

- (a) States in India cannot have their own Constitutions.
- (b) The State of Jammu and Kashmir has its own Constitution.
- (c) States in India do not have the right to secede from the Union of India.
- (d) The maximum number of members in the Council of Ministers of Delhi can be 15 percent of the total number of members in the Legislative Assembly.

Q.104. Consider the following statements about National Wildlife Action Plan (NWAP) of India for 2017-2031 :

- 1. This is the Third National Wildlife Action Plan.
- 2. The NWAP is unique as this is the first time India has recognized the concerns relating to climate change impact on wildlife.
- 3. The NWAP has ten components.

Which of the statements given above is/are correct?

- (a) 1 only (b) 1 and 2 only
- (c) 2 and 3 only (d) 1, 2 and 3

Q.105. Growth in production (in percent) of which one of the following core industries in India during the period 2015-2016 was negative?

- (a) Natural gas (b) Refinery products
- (c) Fertilizer (d) Coal

Q.106. Around twelfth century, Sufi Silsilas began to crystallize in different parts of the Islamic world to signify

- 1. continuous link between the master and disciple

2. unbroken spiritual genealogy to the Prophet Muhammad
3. the transmission of spiritual power and blessings to devotees

Select the correct answer using the code given below.

- (a) 1 and 2 only (b) 2 only
(c) 1 and 3 only (d) 1, 2 and 3

Q.107. In the 10th Mandala of the Rigveda, which one of the following hymns reflects upon the marriage ceremonies?

- (a) Surya Sukta (b) Purusha Sukta
(c) Dana Stutis (d) Uma Sutra

Q.108. Which of the following statements about the Non-Cooperation Movement is/are correct?

1. It was marked by significant participation of peasants from Karnataka.
2. It was marked by non-Brahmin lower caste participation in Madras and Maharashtra.
3. It was marked by the lack of labour unrest in places like Assam, Bengal and Madras.
4. It was badly shaken by the Chauri Chaura incident in 1922 after which Gandhiji decided to continue with the movement on a much smaller scale.

Select the correct answer using the code given below.

- (a) 1 only (b) 1, 2 and 4
(c) 2 and 3 (d) 2 only

Q.109. Which one of the following was a focus country of the World Food India, a mega food event held in November 2017 in New Delhi?

- (a) Germany (b) Japan
(c) Denmark (d) Italy

Q.110. Which one of the following States will host the Nobel Prize Series-India 2018 (Science Impacts Life) Exhibition?

- (a) Gujarat (b) Rajasthan
(c) Goa (d) Madhya Pradesh

Q.111. The Ministry of Communication has recently launched a Pan India scholarship programme for schoolchildren called 'Deen Dayal SPARSH Yojana'. The objective of the scheme is to increase the reach of

- (a) sports (b) philately
(c) music (d) web designing

Q.112. Which one of the following temples of India has won the UNESCO Asia Pacific Award of Merit, 2017 for cultural heritage conservation?

- (a) Kamakhya Temple, Guwahati
(b) Sri Ranganathaswami Temple, Srirangam
(c) Meenakshi Temple, Madurai
(d) Kedarnath Temple, Kedarnath

Q.113. Which one of the following teams was defeated by India to win the Women's Hockey Asia Cup title, 2017?

- (a) Japan (b) China
(c) South Korea (d) Pakistan

Q.114. Which one of the following statements about India is not correct?

- (a) India has 12 major ports and about 200 non-major ports.
(b) 95 percent of India's trade by volume and 68 percent by value are moved through maritime transport.
(c) India has a coastline of about 7500 km.
(d) In the Maritime Agenda, 2010-2020, a target of 300 MT port capacity has been set for the year 2020.

Q.115. Which one of the following statements is not correct?

- (a) India joined MTCR in 2016.
(b) India submitted a formal application for membership of the NSG in 2016.
(c) India proposed the Comprehensive Convention on International Terrorism in 1996.
(d) The Commonwealth Heads of Government Meeting (CHOGM) was held in 2016 at Malta.

Q.116. Which one of the following Amendments to the Constitution of India has prescribed that the Council of Ministers shall not exceed 15 percent of total number of members of the House of the People or Legislative Assembly in the States?

- (a) 91st Amendment (b) 87th Amendment
(c) 97th Amendment (d) 90th Amendment

Q.117. Which of the following about the role of Indian Coast Guard is/are correct?

1. Indian Coast Guard has been entrusted with the offshore security coordination authority
2. Lead intelligence agency for coastal and sea border
3. Coastal security in territorial waters

Select the correct answer using the code given below.

- (a) 1 and 3 only (b) 1, 2 and 3
(c) 1 and 2 only (d) 3 only

Q.118. Which one of the following is India's first indigenously designed and developed long-range subsonic cruise missile which can be deployed from multiple platforms?

- (a) Astra (b) Akash (c) Nirbhay (d) Shankhnaad

Q.119. The Ministry of Power, Government of India has recently constituted a Committee to investigate the causes of the accident that occurred on 1st November, 2017 at Feroze Gandhi Thermal Power Plant Ltd., Unchahar, in Uttar Pradesh. Who among the following is the Chairman of the Committee?

- (a) Dr. L. D. Papney
(b) Shri Dhawal Prakash Antapurkar
(c) Shri Subir Chakraborty
(d) Shri P. D. Siwal

Q.120. In November 2017, an Indian short film, The School Bag won the Best Short Film Award at the South Asian Film Festival held at Montreal. Who among the following is the Director of the film?

- (a) Anurag Kashyap (b) Dheeraj Jindal
(c) Sujoy Ghosh (d) Samvida Nanda

UPSC CDS (I)

ELEMENTARY MATHEMATICS

- Q.1.** If $\cos x + \cos^2 x = 1$, then what is $\sin^2 x + \sin^4 x$ equal to ?
 (a) 1 (b) 1.5 (c) 2 (d) 3
- Q.2.** If $\sin A + \cos A = p$ and $\sin^3 A + \cos^3 A = q$, then which one of the following is correct ?
 (a) $p^3 - 3p + q = 0$ (b) $q^3 - 3q + 2p = 0$
 (c) $p^3 - 3p + 2q = 0$ (d) $p^3 + 3p + 2q = 0$
- Q.3.** If $x = \frac{\sec^2 \theta - \tan \theta}{\sec^2 \theta + \tan \theta}$, then which one of the following is correct ?
 (a) $\frac{1}{3} < x < 3$ (b) $x \notin \left[\frac{1}{3}, 3\right]$
 (c) $-3 < x < -\frac{1}{3}$ (d) $\frac{1}{3} \leq x \leq 3$
- Q.4.** ABC is a right angled triangle with base BC and height AB. The hypotenuse AC is four times the length of the perpendicular drawn to it from the opposite vertex. What is $\tan C$ equal to ?
 (a) $2 - \sqrt{3}$ (b) $\sqrt{3} - 1$ (c) $2 + \sqrt{3}$ (d) $\sqrt{3} + 1$
- Q.5.** ABC is a triangle right angled at C with $BC = a$ and $AC = b$. If p is the length of the perpendicular from C on AB, then which one of the following is correct?
 (a) $a^2 b^2 = p^2 (a^2 + b^2)$ (b) $a^2 b^2 = p^2 (b^2 - a^2)$
 (c) $2a^2 b^2 = p^2 (a^2 + b^2)$ (d) $a^2 b^2 = 2p^2 (a^2 + b^2)$
- Q.6.** The radius and slant height of a right circular cone are 5 cm and 13 cm respectively. What is the volume of the cone?
 (a) $100\pi \text{ cm}^3$ (b) $50\pi \text{ cm}^3$ (c) $65\pi \text{ cm}^3$ (d) $169\pi \text{ cm}^3$
- Q.7.** Two equal circular regions of greatest possible area are cut off from a given circular sheet of area A. What is the remaining area of the sheet?
 (a) $A/2$ (b) $A/3$ (c) $3A/5$ (d) $2A/5$
- Q.8.** If the ratio of the radius of the base of a right circular cone to its slant height is 1 : 3, what is the ratio of the total surface area to the curved surface area?
 (a) 5 : 3 (b) 3 : 1 (c) 4 : 1 (d) 4 : 3
- Q.9.** A right circular cone is sliced into a smaller cone and a frustum of a cone by a plane perpendicular to its axis. The volume of the smaller cone and the frustum of the cone are in the ratio 64 : 61. Then their curved surface areas are in the ratio
 (a) 4 : 1 (b) 16 : 9 (c) 64 : 61 (d) 81 : 64
- Q.10.** In a room whose floor is a square of side 10 m, an equilateral triangular table of side 2 m is placed. Four book-shelves of size $4 \text{ m} \times 1 \text{ m} \times 9 \text{ m}$ are also placed in the room. If half of the rest of the area in the room is to be carpeted at the rate of Rs. 100 per square metre, what is the cost of carpeting (approximately) ?
 (a) Rs. 7, 600 (b) Rs. 5, 635 (c) Rs. 4, 113 (d) Rs. 3, 200
- Q.11.** A region of area A bounded by a circle C is divided into n regions, each of area A/n , by drawing circles of radii $r_1, r_2, r_3, \dots, r_{n-1}$ such that $r_1 < r_2 < r_3 < \dots < r_{n-1}$ concentric with the circle C. If $p_m = \frac{r_{m+1}}{r_m}$ where $m = 1, 2, 3, \dots, (n-2)$, then which one of the following is correct ?
 (a) p increases as m increases
 (b) p decreases as m increases
 (c) p remains constant as m increases
 (d) p increases for some values of m as m increases and then decreases thereafter
- Q.12.** What is the volume of a cone of maximum volume cut out from a cube of edge $2a$ such that their bases are on the same plane ?
 (a) πa^3 (b) $\frac{\pi a^3}{3}$ (c) $\frac{2\pi a^3}{3}$ (d) $\frac{3\pi a^3}{4}$
- Q.13.** The radii of two circles are 4.5 cm and 3.5 cm respectively. The distance between the centres of the circles is 10 cm. What is the length of the transverse common tangent ?
 (a) 4 cm (b) 5 cm (c) 6 cm (d) 7 cm
- Q.14.** There are as many square centimetres in the surface area of a sphere as there are cubic centimetres in its volume. What is the radius of the sphere ?
 (a) 4 cm (b) 3 cm (c) 2 cm (d) 1 cm
- Q.15.** The length of a line segment AB is 2 cm. It is divided into two parts at a point C such that $AC^2 = AB \times CB$. What is the length of CB ?
 (a) $3\sqrt{5} \text{ cm}$ (b) $3 - \sqrt{5} \text{ cm}$ (c) $5\sqrt{3} \text{ cm}$ (d) $\sqrt{5} - 1 \text{ cm}$
- Q.16.** $5^{17} + 5^{18} + 5^{19} + 5^{20}$ is divisible by-
 (a) 7 (b) 9 (c) 11 (d) 13
- Q.17.** If $a+b=2c$, then what is the value of $\frac{a}{a-c} + \frac{c}{b-c}$?
 (a) -1 (b) 0 (c) 1 (d) 2
- Q.18.** If $x = y^{1/a}$, $y = z^{1/b}$ and $z = x^{1/c}$ where $x \neq 1$, $y \neq 1$, $z \neq 1$, then what is the value of abc ?
 (a) -1 (b) 1 (c) 0 (d) 3
- Q.19.** If $2b = a+c$ and $y^2 = xz$, then what is $x^{b-c} y^{c-a} z^{a-b}$ equal to?
 (a) 3 (b) 2 (c) 1 (d) -1
- Q.20.** Which one of the following is correct?
 (a) Decimal expansion of a rational number is terminating.
 (b) Decimal expansion of a rational number is non-terminating.
 (c) Decimal expansion of an irrational number is terminating.
 (d) Decimal expansion of an irrational number is non-terminating and non-repeating.
- Q.21.** If the roots of the equation $px^2 + x + r = 0$ are reciprocal to each other, then which one of the following is correct?
 (a) $p = 2r$ (b) $p = r$ (c) $2p = r$ (d) $p = 4r$
- Q.22.** If $65x - 33y = 97$ and $33x - 65y = 1$, then what is xy equal to?
 (a) 2 (b) 3 (c) -2 (d) -3

Q.23. If $\frac{b}{y} + \frac{z}{c} = 1$ and $\frac{c}{z} + \frac{x}{a} = 1$, then what is $\frac{ab+xy}{bx}$ equal to?
 (a) 1 (b) 2 (c) 0 (d) -1

Q.24. If $\frac{a^2-1}{a} = 5$, then what is the value of $\frac{a^6-1}{a^3}$?
 (a) 125 (b) -125 (c) 140 (d) -140

Q.25. If $x + y + z = 0$, then what is $(y+z-x)^3 + (z+x-y)^3 + (x+y-z)^3$ equal to?
 (a) $(x+y+z)^3$ (b) $3(x+y)(y+z)(z+x)$
 (c) $24xyz$ (d) $-24xyz$

Q.26. If $(x+3)$ is a factor of x^3+3x^2+4x+k , then what is the value of k ?
 (a) 12 (b) 24 (c) 36 (d) 72

Q.27. The smallest integer with 4 digits which is a perfect square is-
 (a) 1000 (b) 1024
 (c) 1089 (d) None of the above

Q.28. Which one of the following is a zero of the polynomial $3x^3+4x^2-7$?
 (a) 0 (b) 1 (c) 2 (d) -1

Q.29. There are two numbers which are greater than 21 and their LCM and HCF are 3003 and 21 respectively. What is the sum of these numbers?
 (a) 504 (b) 508 (c) 514 (d) 528

Q.30. If α and β are the roots of the equation $ax^2+bx+c=0$, then what is the value of the expression $(\alpha+1)(\beta+1)$?
 (a) $\frac{a+b+c}{a}$ (b) $\frac{b+c-a}{a}$ (c) $\frac{a-b+c}{a}$ (d) $\frac{a+b-c}{a}$

Q.31. A man can row at a speed of x km/hr in still water. If in a stream which is flowing at a speed of y km/hr it takes him z hours to row to a place and back, then what is the distance between the two places?

(a) $\frac{z(x^2-y^2)}{2y}$ (b) $\frac{z(x^2-y^2)}{2x}$ (c) $\frac{(x^2-y^2)}{2zx}$ (d) $\frac{z(x^2-y^2)}{x}$

Q.32. A water tank has been fitted with two tapes P and Q and a drain pipe R. Tap P and Q fill at the rate of 12 litres per minute and 10 litres per minute respectively.

Consider the following statements S1, S2 and S3:

S1 : Pipe R drains out at the rate of 6 litres per minute

S2 : If both the tapes and the drain pipe are opened simultaneously, then the tank is filled in 5 hours 45 minutes.

S3 : Pipe R drains out (fully) the filled tank in 15 hours 20 minutes.

To know what is the capacity of the tank, which one of the following is correct?

- (a) S2 is only sufficient
 (b) S1, S2 and S3 are necessary
 (c) Any two out of S1, S2 and S3 are sufficient

(d) None of the above

Q.33. A car has an average speed of 60 km per hour while going from Delhi to Agra and has an average speed of y km per hour while returning to Delhi from Agra (by travelling the same distance). If the average speed of the car for the whole journey is 48 km per hour. then what is the value of y ?

- (a) 30 km per hour (b) 35 km per hour
 (c) 40 km per hour (d) 45 km per hour

Q.34. An article is sold at a profit of 32%. If the cost price is increased by 20% and the sale price remains the same, then the profit percentage becomes.

- (a) 10% (b) 12% (c) 15% (d) 20%

Q.35. A, B, C, D and E start a partnership firm. Capital contributed by A is three times that contributed by D. E contributes half of A's contribution and B contributes one-third of E's contribution and C contributes two-third of A's contribution. If the difference between the combined shares of A, D and E and the combined shares of B and C in the total profit of the firm is Rs. 13,500, what is the combined share of B, C and E? (The shares are supposed to be proportional to the contributions)

- (a) Rs. 13, 500 (b) Rs. 18, 000
 (c) Rs. 19, 750 (d) Rs. 20, 250

Q.36. A Pie Chart is drawn for the following data:

Sector	Percentage
Agriculture and Rural Development	12.9
Irrigation	12.5
Energy	27.2
Industry and Mineral's	15.4
Transport and communication	15.9
Social Services	16.1

What is the angle (approximately) subtended by the Social Services Sector at the centre of the circle?

- (a) 45° (b) 46° (c) 58° (d) 98°

Q.37. The arithmetic mean of two numbers is 10 and their geometric mean is 8. What are the two numbers?

- (a) 15, 5 (b) 12, 8 (c) 16, 4 (d) 18, 2

Q.38. The arithmetic mean of 11 observations is 11. The arithmetic mean of the first 6 observations is 10.5 and the arithmetic mean of the last 6 observations is 11.5. What is the sixth observation?

- (a) 10.0 (b) 10.5 (c) 11.0 (d) 11.5

Q.39. What is $\sin^4\theta - \cos^4\theta$ equal to for any real number θ ?

- (a) 1 (b) $1-2\sin^2\theta$ (c) $2\cos^2\theta+1$ (d) $1-2\cos^2\theta$

Q.40. What is $\cot 1^\circ \cot 23^\circ \cot 45^\circ \cot 67^\circ \cot 89^\circ$ equal to?

- (a) 0 (b) 1 (c) $1/2$ (d) $1/3$

Q.41. What angle does the hour hand of a clock describe in 10 minutes of time?

- (a) 1° (b) 5° (c) 6° (d) 10°

Q.42. Consider the following statements:

- $(\sec^2\theta-1)(1-\operatorname{cosec}^2\theta)=1$
- $\sin\theta(1+\cos\theta)^{-1} + (1+\cos\theta)(\sin\theta)^{-1} = 2\operatorname{cosec}\theta$.

Which of the above is/are correct?

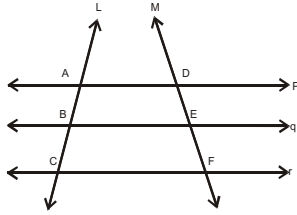
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- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- Q.43.** Each side of a square subtends an angle of 60° at the tip of a tower of height h metres standing at the centre of the square. If l is the length of each side of the square, then what is h^2 equal to?
- (a) $2l^2$ (b) $\frac{l^2}{2}$ (c) $\frac{3l^2}{2}$ (d) $\frac{2l^2}{3}$
- Q.44.** From a height of h units, a man observes the angle of elevation as α and angle of depression as β of the top and the bottom respectively of a tower of height H ($>4h$). To what further height should he climb so that the values of angle of elevation and angle of depression get interchanged for the top and bottom of the tower?
- (a) $H - h$ units (b) $H - 2h$ units
(c) $H - 3h$ units (d) $H - 4h$ units
- Q.45.** If $\sec x \csc x = 2$, then what is $\tan^2 x + \cot^2 x$ equal to?
- (a) 2 (b) 2^{n+1} (c) 2^n (d) 2^{n-1}
- Q.46.** The locus of the mid-points of the radii of length 16 cm of a circle is
- (a) A concentric circle of radius 8 cm
(b) A concentric circle of radius 16 cm
(c) The diameter of the circle
(d) A straight line passing through the centre of the circle
- Q.47.** The curved surface area of a right circular cone is 1.76 m^2 and its base diameter is 140 cm. What is the height of the cone?
- (a) 10 cm (b) $10\sqrt{2}$ cm (c) $20\sqrt{2}$ cm (d) $10\sqrt{15}$ cm
- Q.48.** Consider the following statements ;
1. The orthocentre of a triangle always lies inside the triangle.
 2. The centroid of a triangle always lies inside the triangle.
 3. The orthocentre of a right angled triangle lies on the triangle,
 4. The centroid of a right angled triangle lies on the triangle.
- Which of the above statements are correct ?
- (a) 1 and 2 (b) 1 and 4 (c) 2 and 3 (d) 2 and 4
- Q.49.** The locus of a point equidistant from two intersecting lines is
- (a) A straight line (b) A circle
(c) A pair of straight lines (d) None of the above
- Q.50.** Consider the following statements :
- Two triangles are said to be congruent, if
1. Three angles of one triangle are equal to the corresponding three angles of the other triangle.
 2. Three sides of one triangle are equal to the corresponding three sides of the other triangle.
 3. Two sides and the included angle of one triangle are equal to the corresponding two sides and the included angle of the other triangle.
 4. Two angles and the included side of one triangle are equal to the corresponding two angles and the included side of the other triangle.
- Which of the above statements are correct ?
- (a) 1, 2 and 3 (b) 1, 3 and 4 (c) 1, 2 and 4 (d) 2, 3 and 4
- Q.51.** Given that the angles of a polygon are all equal and each angle is a right angle.
- Statement-1:** The polygon has exactly four sides.
Statement-2: The sum of the angles of a polygon having n sides is $(3n - 8)$ right angles.
- Which one of the following is correct in respect of the above statements ?
- (a) Both Statement-1 and Statement-2 are true and Statement-2 is the correct explanation of Statement-1
(b) Both Statement-1 and Statement-2 are true but Statement-2 is not the correct explanation of Statement-1
(c) Statement-1 is true but Statement-2 is false
(d) Statement-1 is false but Statement-2 is true
- Q.52.** If the length of a side of a square is increased by 8 cm, its area increases by 120 square cm. What is the length of a side of the square?
- (a) 2.5 cm (b) 3.5 cm (c) 4.5 cm (d) 5.5 cm
- Q.53.** What is the largest power of 10 that divides the product $1 \times 2 \times 3 \times 4 \times \dots \times 23 \times 24 \times 25$?
- (a) 2 (b) 4
(c) 5 (d) None of the above
- Q.54.** Walls (excluding their roofs and floors) of 5 identical rooms having length, breadth and height 6 m, 4 m and 2.5 m respectively are to be painted. Paints are available only in cans of 1 L and one litre of paint can be used for painting 20 square metres. What is the number of cans required for painting ?
- (a) 10 (b) 12 (c) 13 (d) 14
- Q.55.** A rectangular pathway having width 4-5 m and length 10 m will have to be tiled using square tiles of side 50 cm. Each packet of such tiles contains 20 pieces and costs Rs. 100. What will be the total cost of tiles for the pathway ?
- (a) Rs. 1, 200 (b) Rs. 1, 100 (c) Rs. 1, 000 (d) Rs. 900
- Q.56.** A cube of maximum volume (each corner touching the surface from inside) is cut from a sphere. What is the ratio of the volume of the cube to that of the sphere ?
- (a) $3:4\pi$ (b) $\sqrt{3}:2\pi$ (c) $2:\sqrt{3}\pi$ (d) $4:3\pi$
- Q.57.** If the ratio of the circumference of the base of a right circular cone of radius r to its height is $3:1$, then what is the area of the curved surface of the cone ?
- (a) $3\pi r^2$ (b) $\frac{2r^2\sqrt{4\pi^2+9}}{3}$
(c) $\frac{\pi r^2\sqrt{\pi^2+1}}{3}$ (d) $\frac{\pi r^2\sqrt{4\pi^2+9}}{3}$
- Q.58.** A wire is in the form of a circle of radius 98 cm. A square is formed out of the wire. What is the length of a side of the square ? (Use $\pi = 22/7$)
- (a) 146 cm (b) 152 cm (c) 154 cm (d) 156 cm
- Consider the following for the next two (02) questions;**
In a triangle ABC, a , b and c are the lengths of the sides and p , q and r are the lengths of its medians.
- Q.59.** Which one of the following is correct ?

- (a) $2(p + q + r) = (a + b + c)$ (b) $2(p + q + r) > 3(a + b + c)$
 (c) $2(p + q + r) < 3(a + b + c)$ (d) $11(p + q + r) > 10(a + b + c)$
- Q.60.** Which one of the following is correct ?
 (a) $(a + b + c) < (p + q + r)$
 (b) $3(a + b - c) < 4(p + q + r)$
 (c) $2(a + b + c) > 3(p + q + r)$
 (d) $3(a + b + c) > 4(p + q + r)$
- Q.61.** The remainder when $3x^3 + kx^2 + 5x - 6$ is divided by $(x + 1)$ is -7. What is the value of k ?
 (a) -14 (b) 14 (c) -7 (d) 7
- Q.62.** If $f(x)$ and $g(x)$ are polynomials of degree p and q respectively, then the degree of $\{f(x) \pm g(x)\}$ (if it is non-zero) is-
 (a) Greater than $\min(p, q)$
 (b) Greater than $\max(p, q)$
 (c) Less than or equal to $\max(p, q)$
 (d) Equal to $\min(p, q)$
- Q.63.** What is the value of $\frac{\sqrt{5} - \sqrt{3}}{\sqrt{5} + \sqrt{3}} - \frac{\sqrt{5} + \sqrt{3}}{\sqrt{5} - \sqrt{3}}$?
 (a) $-2\sqrt{15}$ (b) $2\sqrt{15}$ (c) $\sqrt{15}$ (d) $-\sqrt{15}$
- Q.64.** What is the value of $\frac{1}{1 + x^{b-a} + x^{c-a}} + \frac{1}{1 + x^{a-b} + x^{c-b}} + \frac{1}{1 + x^{a-c} + x^{b-c}}$ where $x \neq 0$?
 (a) -1 (b) 0 (c) 1 (d) 3
- Q.65.** The sum of a number and its square is 20. Then the number is
 (a) -5 or 4 (b) 2 or 3 (c) -5 only (d) 5 or -4
- Q.66.** If the price of wheat rises by 25%, then by how much percent must a man reduce his consumption in order to keep his budget the same as before?
 (a) 15% (b) 20% (c) 25% (d) 30%
- Q.67.** $\frac{1}{25}$ of the students who registered did not appear for the examination, $\frac{11}{20}$ of those who appeared passed. If the number of registered students is 2000, the number who passed is
 (a) 1920 (b) 1056 (c) 1020 (d) 864
- Q.68.** What is the difference between $0.\bar{9}$ and 0.9?
 (a) 0 (b) 0.099 (c) 0.1 (d) 0.09
- Q.69.** If $A : B = 1 : 2$, $B : C = 3 : 4$, $C : D = 2 : 3$ and $D : E = 3 : 4$, then what is $B : E$ equal to?
 (a) $3 : 2$ (b) $1 : 8$ (c) $3 : 8$ (d) $4 : 1$
- Q.70.** A work when done by 10 women is completed in 12 days. when done by 5 men. How many days will it take to complete when 6 woman and 3 men are employed to perform the same job?
 (a) 12 (b) 10 (c) 8 (d) 5
- Q.71.** A man undertakes to do a certain work in 150 days. He employs 200 men. He finds that only a quarter of the work is done in 50 days. How many additional men should he employ so that the whole work is finished in time?
 (a) 75 (b) 85 (c) 100 (d) 120
- Q.72.** A train moving with a speed of 60 km per hours crosses an electric pole in 30 seconds. What is the length of the train in metres?
 (a) 300 (b) 400 (c) 500 (d) 600
- Q.73.** Rs 120 is distributed among A, B and C so that A's share is 20 more than B's share?
 (a) Rs 10 (b) Rs 20 (c) Rs 15 (d) Rs 25
- Q.74.** In the following table of inverse variation, what are the values of A, B and C respectively?
- | | | | | |
|---|----|----|---|----|
| M | 15 | -6 | 2 | C |
| N | -4 | A | B | 60 |
- (a) 10, -30, -1 (b) 10, -1, 30 (c) -30, 10, -1 (d) -1, -30, 10
- Q.75.** A person borrowed Rs 5,000 at 5% rate of interest per annum and immediately lent it at 5.5%. After two years he collected the amount and settled his loan. What is the amount gained by him in this transaction?
 (a) Rs. 25 (b) Rs. 50 (c) Rs. 100 (d) Rs. 200
- Q.76.** What is the area of the largest circular disc cut from a square of side $\frac{2}{\sqrt{\pi}}$ units?
 (a) π square units (b) 1 square units
 (c) π^2 square units (d) 2 square units
- Q.77.** The product of the lengths of the diagonals of square is 50 square units. What is the length of a side of the square?
 (a) $5\sqrt{2}$ units (b) 5 units (c) 10 units (d) $2\sqrt{5}$ units
- Q.78.** The surface area of a closed cylindrical box is 352 square cm. If its height is 10 cm, then what is its diameter? (Use $\pi = \frac{22}{7}$)
 (a) 4 cm (b) 8 cm (c) 9.12 cm (d) 19.26 cm
- Q.79.** A square and an equilateral triangle have the same perimeter. If the diagonal of the square is $6\sqrt{2}$ cm, then what is the area of the triangle?
 (a) $12\sqrt{2} \text{ cm}^2$ (b) $12\sqrt{3} \text{ cm}^2$ (c) $16\sqrt{2} \text{ cm}^2$ (d) $16\sqrt{3} \text{ cm}^2$
- Q.80.** What is the area of the region bounded internally by a square of side of length 'a' and externally by a circle passing through the four corners of the square?
 (a) $(\pi - 1)a^2$ square units (b) $\frac{(\pi - 1)a^2}{2}$ square units
 (c) $(\pi - 2)a^2$ square units (d) $\frac{(\pi - 2)a^2}{2}$ square units
- Q.81.** In the figure given below, XA and XB are two tangents to a circle. $\angle AXB = 50^\circ$ and AC is parallel to XB, then what is $\angle ACB$ equal to?
-
- (a) 70° (b) 65° (c) 60° (d) 55°

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- Q.82.** In the figure given below, p, q, r are parallel lines; l and m are two transversals.

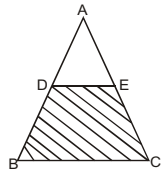


Consider the following:

1. $AB : AC = DE : DF$ 2. $AB \times EF = BC \times DE$
which of the above is/are correct ?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

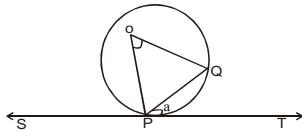
- Q.83.** In the equilateral triangle ABC given below, $AD = DB$ and $AE = EC$. If l is the length of a side of the triangle, then what is the area of the shaded region?



- (a) $\frac{3\sqrt{3}l^2}{16}$ (b) $\frac{3l^2}{16}$ (c) $\frac{3\sqrt{3}l^2}{32}$ (d) $\frac{3l^2}{32}$

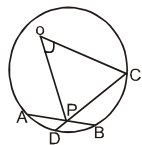
- Q.84.** In the figure given below, SPT is a tangent to the circle at P and O is the centre of the circle. If $\angle QPT = \alpha$, then what is $\angle POQ$ equal to ?

- (a) α (b) 2α (c) $90^\circ - \alpha$ (d) $180^\circ - 2\alpha$



- Q.85.** In the figure given below, two equal chords at point P . If $AB = CD = 10$ cm, $OC = 13$ cm (O is the center of the circle) and $PB = 3$ cm, then what is the length of OP ?

- (a) 5 cm (b) 6 cm (c) $2\sqrt{29}$ cm (d) $2\sqrt{37}$ cm



- Q.86.** At present the average of the ages of a father and a son is 25 year. After seven years the son will be 17 years old. What will be the age of the father after 10 years ?

- (a) 44 years (b) 45 years (c) 50 years (d) 52 years

- Q.87.** If 5 tractors can plough 5 hectares of land in 5 day, then what is the number of tractors required to plough 100 hectares in 50 days?

- (a) 100 (b) 20 (c) 10 (d) 5

- Q.88.** A merchant commences with a certain capital and gains annually at the rate of 25%. At the end of 3 years he has 10,000. What is the original amount that the merchant invested ?

- (a) 5,120 (b) 5,210 (c) 5,350 (d) 5,500

- Q.89.** Which one of the following decimal number is a rational number with denominator 37 ?

- (a) 0.459459459... (b) 0.459459459
(c) 0.0459459459... (d) 0.00459459...

- Q.90.** The annual income of a person decreases by 64 if the annual rate of interest decreases from 4% to 3.75%. What is his original annual income ?

- (a) 24,000 (b) 25,000 (c) 25,600 (d) 24,600

- Q.91.** For $0 < m < 1$, Which one of the following is correct ?

- (a) $\log_{10} m < m^2 < m < m^{-1}$ (b) $m < m^{-1} < m^2 < \log_{10} m$
(c) $\log_{10} m < m < m^{-1} < m^2$ (d) $\log_{10} m < m^{-1} < m < m^2$

- Q.92.** A gentleman left a sum of Rs 39,000 to be distributed after his death among his widow, five sons and daughters. If each son receives 3 times as much as a daughter receives, and each daughter receives twice as much as their mother receives, what is the widow's share ?

- (a) Rs 1,000 (b) Rs 1,200
(c) Rs 1,500 (d) None of the above

- Q.93.** Three numbers which are co-prime to each other, are such that the product of the first two is 286 and that of the last two is 770. What is the sum of the three numbers ?

- (a) 85 (b) 80 (c) 75 (d) 70

- Q.94.** The age of a woman is a two-digit integer. On reversing this integer, the new integer is the age of her husband who is elder to her. The difference between their ages is one-eleventh of their sum. What is the difference between their ages ?

- (a) 8 years (b) 9 years (c) 10 years (d) 11 years

- Q.95.** A passenger train and a goods train are running in the same direction on parallel railway tracks. If the passenger train now takes three times as long to pass the goods train, as when they are running in opposite directions, then what is the ratio of the speed of the passenger train to the goods train ?

(Assume that the trains run at uniform speeds)

- (a) 2 : 1 (b) 3 : 2 (c) 4 : 3 (d) 1 : 1

- Q.96.** All odd prime numbers upto 110 are multiplied together. What is the unit digit in this product ?

- (a) 0 (b) 3
(c) 5 (d) None of the above

- Q.97.** An alloy A contains two elements, copper and tin in the ratio of 2 : 3, whereas an alloy B contains the same elements in the ratio of 3 : 4. If 20 kg of alloy A, 28 kg of alloy B and some more pure copper are mixed to form a third alloy C which now contains copper and tin in the ratio of 6 : 7 then what is the quantity of pure copper mixed in the alloy C ?

- (a) 3 kg (b) 4 kg (c) 5 kg (d) 7 kg

- Q.98.** A quadratic polynomial $ax^2 + bx + c$ is such that when it is divided by x , $(x-1)$ and $(x+1)$, the remainders are 3, 6 and 4 respectively. What is the value of $(a+b)$?

- (a) 3 (b) 2 (c) 1 (d) -1

- Q.99.** If the average of 9 consecutive positive integers is 55, then what is the largest integer ?

- (a) 57 (b) 58 (c) 59 (d) 60

- Q.100.** The average of the ages of 15 students in a class is 19 years. When 5 new students are admitted to the class, the average age of the class becomes 18.5 years. What is the average age of the 5 newly admitted students ?

- (a) 17 years (b) 17.5 years (c) 18 years (d) 18.5 years

ENGLISH ANSWER

- Q.1. (c)** Hot potato. A problem so controversial and sensitive that it is risky to deal with.
- Q.2. (a)** "You snooze, you lose" is an idiom used to warn people who aren't paying attention, wait too long, or are indecisive that they will eventually pass up the opportunity to gain or do something they need, want, or aspire.
- Q.3. (a)** Disagree; to not be convinced.
- Q.4. (b)** My two cents in" is an American idiomatic expression, taken from the original English idiom "to put in my two penny worth" or "my two-cents." It is used to preface the tentative statement of one's opinion.
- Q.5. (b)** Without warning; unexpectedly.
- Q.6. (a)** Meeting someone not expected to be at a certain place. encountering the same people, events, or situations in an unexpected place. someone knows a person you know. used to express surprise that events or people at different places are somehow connected.
- Q.7. (a)** In the future.
- Q.8. (a)** To elicit shock, surprise, or offense, typically through unconventional actions or words. The phrase typically suggests negative attention or judgment.
- Q.9. (c)** To take responsibility for doing something, even though it is difficult. It's time they stepped up to the plate and took responsibility for their actions.
- Q.10. (b)** Something that is extremely difficult to find or get.
- Q.11. (a)** You do a favor for me and I'll do a favor for you.; If you do something for me that I cannot do for myself, I will dosomething for you that you cannot do for yourself.
- Q.12. (a)** Without hesitation or good reason.
- Q.13. (b)** It's your responsibility now; it's up to you.
- Q.14. (b)** a situation in which you can enjoy the advantages of two very different things at the same time.
- Q.15. (d)** Very expensive
- Q.16. (b)** **Q.17. (c)** **Q.18. (c)** **Q.19. (b)** **Q.20. (b)**
- Q.21. (a)** **Q.22. (a)** **Q.23. (a)** **Q.24. (c)** **Q.25. (b)**
- Q.26. (a)** **Q.27. (c)** **Q.28. (b)** **Q.29. (a)** **Q.30. (c)**
- Q.31. (b)** Remove by
- Q.32. (b)** Use 'whom' instead of 'who'
- Q.33. (a)** Use 'electric companies' instead of 'electricity companies'
- Q.34. (d)** No error
- Q.35. (b)** Use 'was' instead of 'were'
- Q.36. (b)** Use 'in the court for any lies'
- Q.37. (b)** Use 'for singing'
- Q.38. (c)** Use 'anything' instead of 'something'
- Q.39. (b)** Use 'can be used to make' instead of 'can be made'
- Q.40. (c)** Use 'had done' instead of 'has done'
- Q.41. (a)** Use 'has been' instead of 'have been'
- Q.42. (c)** Use 'had a cold'
- Q.43. (d)** No error
- Q.44. (b)** Use 'formation' instead of 'form'
- Q.45. (b)** Use 'as much as' instead of 'more than'
- Q.46. (d)** No error
- Q.47. (b)** Oust from-expel from the position.
- Q.48. (d)** No error
- Q.49. (c)** Use 'is' instead of 'are'
- Q.50. (d)** No error
- Q.51. (a)** **Q.52. (b)** **Q.53. (c)** **Q.54. (d)** **Q.55. (d)**
- Q.56. (b)** **Q.57. (b)** **Q.58. (b)** **Q.59. (b)** **Q.60. (b)**
- Q.61. (b)** Orient = the countries of the East
Occident = the countries of the East
- Q.62. (d)** **Q.63. (d)** **Q.64. (b)** **Q.65. (b)** **Q.66. (c)**
- Q.67. (d)** **Q.68. (b)**
- Q.69. (a)** Evade means escape or avoid (someone/something), especially by trickery.
- Q.70. (c)** **Q.71. (c)** Q R P S
- Q.72. (a)** R P Q S **Q.73. (d)** S P Q R **Q.74. (b)** R P S Q
- Q.75. (b)** P S Q R **Q.76. (a)** Q P S R **Q.77. (b)** Q P R S
- Q.78. (a)** R Q S P **Q.79. (b)** S R P Q **Q.80. (b)** R Q P S
- Q.81. (c)** Naive = innocent ; credulous
- Q.82. (b)** Impertinent = disrespectful
Congenial = friendly
- Q.83. (c)** **For other options :** Scorn (N) = mock
Censure (V) = criticise
- Q.84. (b)** Composed = calm, cool
- Q.85. (c)** Indolence = avoidance of activity
- Q.86. (a)**
- Q.87. (c)** Repulsive = disgusting
Enchanting = fascinating, tempting
- Q.88. (d)** **For other options:** repugnant = hostile; abhorrent
- Q.89. (c)** **For other options :** Militant = aggressive
Fanatical = overenthusiastic, bigoted, fervid
- Q.90. (d)** Resilient = flexible
For other options : All are synonyms of Vulnerable.
- Q.91. (b)** Absolve of = declare free from guilt/punishment.
- Q.92. (b)** Put off = postpone
- Q.93. (d)** Run out = exhaust
- Q.94. (c)** Scarcely+had+subject+V3
- Q.95. (d)** Get over = recover
- Q.96. (d)** Spilt milk = the milk which has been dropped or overflowed.
- Q.97. (c)** **Q.98. (b)** **Q.99. (d)**
- Q.100. (c)** A wet blanket = A pessimistic person
- Q.101. (b)** **Q.102. (d)** **Q.103. (a)**
- Q.104. (d)** Vendor = person who sells wares.
- Q.105. (c)**
- Q.106. (a)** Embezzled = stolen or misappropriate
- Q.107. (c)** **Q.108. (d)** **Q.109. (d)** **Q.110. (c)**
- Q.111. (c)** S P R Q **Q.112. (b)** P R S Q **Q.113. (c)** R P S Q
- Q.114. (c)** S R P Q **Q.115. (c)** Q R S P **Q.116. (d)** S P R Q
- Q.117. (a)** S P R Q **Q.118. (d)** Q R P S **Q.119. (c)** S P Q R
- Q.120. (a)** S Q R P

GENERAL KNOWLEDGE ANSWERS

Q.1.(d) A sinkhole is a hole in the ground that forms when water dissolves surface rock. Often, this surface rock is limestone, which is easily eroded, or worn away, by the movement of water.

In a landscape where limestone sits underneath the soil, water from rainfall collects in cracks in the stone. These cracks are called joints. Slowly, as the limestone dissolves and is carried away, the joints widen until the ground above them becomes unstable and collapses. The collapse often happens very suddenly and without very much warning. Water collects in these collapsed sections, forming sinkholes.

Sinkholes are often funnel-shaped, with the wide end open at the surface and the narrow end at the bottom of the pool.

Q.2.(d) A meandering river valley that has cut down its bed into the bedrock, because of uplift or lowered base level, is called incised, intrenched, entrenched, inclosed or ingrown. It is characteristic of antecedent drainage systems. Finer distinctions are recognized by some authorities. Thornbury (1954) proposed that incised or inclosed meanders are terms appropriate to all sorts of meanders cut down into bedrock, and that two sub-types should be identified:

Intrenched or entrenched meanders are those cut down with symmetrical valley sides, i.e., due to rapid down-cutting; and Ingrown meanders (Rich, 1914) are those with a pronounced asymmetry of cross section, which would normally develop under slower incision.

Q.3.(a) Glaciers cut distinctive U-shaped valleys with a flat floor and steep sides. The glacier widens, steepens, deepens and smoothes V-shaped river valleys, eg Great Langdale Valley in the Lake District (England).

Q.4.(b) Species richness is generally lower in the Arctic than at lower latitudes, and richness also tends to decline from the low to high Arctic. However, patterns of species richness vary spatially and include significant patchiness. Further, there are differences among taxonomic groups, with certain groups being most diverse in the Arctic.

Characteristics of Tundra-

Extremely cold climate, Low biotic diversity, Simple vegetation structure, Limitation of drainage, Short season of growth and reproduction, Energy and nutrients in the form of dead organic material

Q.5.(b) Tides are the rise and fall of sea levels caused by the combined effects of the gravitational forces exerted by the Moon and the Sun and the rotation of Earth. The earth rotates from west to east.

Q.6.(d) Tuberculosis (TB) is an infectious disease usually caused by the bacterium *Mycobacterium tuberculosis* (MTB). It generally affects the lungs. Tuberculosis is spread through the air when people who have active TB in their lungs cough, spit, speak, or sneeze.

Q.7.(b) Bioaccumulation is defined as the increase in concentration of a substance(s) in an organism or a part of that organism. Toxic substances are lipophilic

or fat-loving, the reason why these substances are deposited and concentrated in the fat tissues of the organisms. The affected organism has a higher concentration of the substance than the concentration in the organism's surrounding environment. The toxic substances are very slowly metabolized or excreted so if the organism keeps on consuming prey or food contaminated with toxic substances, the concentration of the substance will further increase in its body, hence, bioaccumulation results. When a certain threshold level is reached, measured in parts per million (ppm), symptoms due to the type of toxin are manifested.

Q.8.(d) A silverfish is a small, wingless insect in the order Zygentoma. Jellyfish or jellies are soft-bodied, free-swimming aquatic animals with a gelatinous umbrella-shaped bell and trailing tentacles. Cuttlefish or cuttles are marine animals of the order Sepiida. They belong to the class Cephalopoda, which also includes squid, octopuses, and nautilus. The Exocoetidae are a family of marine fishes in the order Belontiiformes class Actinopterygii. Fish of this family are known as flying fish.

Q.9.(a) Adipocytes are cells that derive from multipotential mesenchymal cells; their main role is to store energy in the form of lipids to cushion and insulate the body from the outer environment. Chondrocytes are the only cells found in healthy cartilage. They produce and maintain the cartilaginous matrix, which consists mainly of collagen and proteoglycans. An osteocyte, a star-shaped type of bone cell, is the most commonly found cell in mature bone tissue, and can live as long as the organism itself. The adult human body has about 42 billion osteocytes. Reticulocytes are immature red blood cells.

Q.10.(d)

Q.11.(c) Lysosomes are spherical membranous sacs of enzymes. These enzymes are acidic hydrolase enzymes that can digest cellular macromolecules. The lysosome membrane helps to keep its internal compartment acidic and separates the digestive enzymes from the rest of the cell.

Lysosome enzymes are made by proteins from the endoplasmic reticulum and enclosed within vesicles by the Golgi apparatus.

Q.12.(d)

Q.13.(c)

Q.14.(a)

The collision-coalescence process is an important mechanism in forming raindrops in warmer clouds. In these warm clouds raindrops form exclusively by this process. Most tropical rain is formed in this way. The collision-coalescence process is of relatively little importance in middle and high latitudes where, even in the summer, most precipitation begins high in the clouds where temperatures are well below freezing and the dominant precipitation-producing mechanism is the so-called ice-crystal or Bergeron process. However, falling raindrops in these clouds do grow by the collision-coalescence process.

- Q.15.(b)**
- Q.16.(a)** Planetsimal hypothesis- Chamberlin
Thermal contraction theory- Jeffreys
Geosynclinal Orogen theory- Kober
Hypothesis of sliding continent- Daly
- Q.17.(b)** Bright light is found to emit from photographer's flashgun. This brightness is due to the presence of Xenon gases.
- Q.18.(b)** Two or more elements combine together chemically to form a new substance called compound.
- Q.19.(d)** Temporary hardness is due to the presence of calcium hydrogencarbonate $\text{Ca}(\text{HCO}_3)_2$ and magnesium hydrogencarbonate $\text{Mg}(\text{HCO}_3)_2$.
- Q.20.(d)** Isobars are elements having same mass no. but different no. of electrons. They have same mass no. But different atomic no. Therefore calcium and Argon are isobars as they have atomic no. 20 and 18 but their mass no. is 40.
Name: Argon
Symbol: Ar
Atomic Number: 18
Atomic Mass: 39.948 amu
Melting Point: -189.3°C (83.85 K , -308.74°F)
Boiling Point: -186.0°C (87.15 K , -302.8°F)
Number of Protons/Electrons: 18
Number of Neutrons: 22
- Q.21.(a)** The objects will approach the same temperature, and in the absence of loss to other objects, they will then maintain a constant temperature. They are then said to be in thermal equilibrium. Thermal equilibrium is the subject of the Zeroth Law of Thermodynamics.
- Q.22.(c)**
- Q.23.(d)** According to Rayleigh's law, the intensity of scattered light varies inversely as the fourth power of its wavelength. Sunlight consists of seven colours. Of these, red has the maximum wavelength. During sunrise and sunset, the rays have to travel a larger part of the atmosphere because they are very close to the horizon. Therefore, light other than red is mostly scattered away. Most of the red light, which is the least scattered, enters our eyes. Hence, the sun and the sky appear red.
- Q.24.(c)**
- Q.25.(d)** In the exclusive economic zone, the coastal State has:
(a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
(b) Jurisdiction as provided for in the relevant provisions of this Convention with regard to:
(i) the establishment and use of artificial islands, installations and structures;
(ii) marine scientific research;
- (iii) the protection and preservation of the marine environment;
(c) other rights and duties provided for in this Convention.
- Q.26.(c)** Integrated coastal zone management (ICZM) or Integrated coastal management (ICM) is a process for the management of the coast using an integrated approach, regarding all aspects of the coastal zone, including geographical and political boundaries, in an attempt to achieve sustainability. national ICZM capacity building; piloting ICZM approaches in Gujarat; piloting ICZM approaches in Orissa and; piloting ICZM approaches in West Bengal.
- Q.27.(a)** The national water academy located in Pune, Maharashtra.
- Q.28.(a)**
- Q.29.(a)** Pascal's law basically states that any pressure applied to a fluid inside a closed system will transmit that pressure equally in all directions throughout the fluid. This law is the basic principle that causes hydraulic power in heavy construction machines to work.
- Q.30.(c)** The main constituents of the dry atmosphere are nitrogen (78.084% by volume), oxygen (20.946% by volume) and argon (0.934% by volume), but much lower concentrations other noble gases can also be found.
- Q.31.(a)** Mizoram has the highest percentage (94.4%) of Scheduled Tribe Population to its Population & in other Nagaland(86.5%), Meghalay(86.1%) & Arunachal Pradesh(68.8%)
Highest ST Population in Indian state's is MP & Least ST Population has UP.
- Q.32.(d)** There are two main types of igneous volcanic rocks—Extrusive, and Intrusive. Extrusive volcanic rock's (igneous rock) formation in which hot magma from inside the Earth exhaust on the surface as lava. While, Intrusive volcanic rock is made from magma which becomes solid before reaching the surface. Himalay is an example of intrusive volcanic rocks
- Q.33.(d)** Karewas is a type of soil which are thick deposits of glacial clay and other material. These deposits are found in the mostly Kashmir valley between pir panjal and Zaskar range in the Himalaya.
It is very suitable for Saffron, Almond, Walnut cultivation. Ling nut is known as Water Caltrop or Singhada. It grows in the pond, wet muddy land in the warm climate. It is found mostly in Europe and Asia region.
- Q.34.(b)** Ganga River originated as Bhagirathi in the Gomukh Glacier Himalayan mountain in Uttarakhand. Ganga forms devpryag where Bhagirathi and Alakananda rivers meet. It travels 5 Indian states (Uttarakhand, UP, Bihar, Jharkhand & WB) 2525 km & meet to Bay of Bengal (Bangladesh). Ganga tributaries are divided into two types—
1 Left bank tributaries- Ramganga, Gomti, Ghaghara, Gandak, Kosi, Mahananda
2 Right bank tributaries- Yamuna, Tamsa, Son, Punpun

UPSC CDS (I)

Q.35.(a) Director General of Foreign Trade (DGFT) introduced a new "Niryat Bandhu Yojna" for International Business mentoring for first generation entrepreneurs in international business enterprises.

Q.36.(d) Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is a youth employment scheme of Indian Government

It was launched by on 25 September 2014 by Union Ministers Nitin Gadkari and Venkaiah Naidu on the occasion of 98th birth anniversary of Pandit Deendayal Upadhyaya. It's Vision is "Transform rural poor youth into an economically independent and globally relevant workforce". It aims to target youth, under the age group of 15–35 years & benefit approx 60 million poor rural folk. DDU-GKY is a part of the National Rural Livelihood Mission (NRLM)

Q.37.(b) The Hambantota Port is a maritime port in Hambantota, Sri Lanka. Sri Lanka has formally handed over its southern port of Hambantota to China on a 99-year lease.

Q.38.(a) The Sagarmala project aims to promote port-led development along India's 7500 km long coastline by developing string of ports around coastal

The projects under Coastal Berth Scheme are distributed over eight states with highest number of projects in Maharashtra (12 projects), Andhra Pradesh and Goa (10 projects), Karnataka (6 projects), Kerala and Tamil Nadu (3 projects), Gujarat (2 projects) and West Bengal (1 project)

Q.39.(a) The National Adaptation Fund for Climate Change (NAFCC) was established in August, 2015 to meet the cost of adaptation to climate change for the State and Union Territories of India that are particularly vulnerable to the adverse effects of climate change.

Q.40.(b) SAMPRITI- 2017 is an important bilateral joint military exercise between India and Bangladesh. Seventh Indo-Bangladesh joint military exercise SAMPRITI- 2017 was held at Counter Insurgency and Jungle Warfare School, Vairengte in Mizoram.

Q.41.(a) Vishakha case of sexual harassment at workplace is a case of landmark judgement by Supreme Court of India.

Q.42.(b) BRICS was founded June 2006.

Before 2010 its only four countries group BRIC, but South Africa join BRIC 2010 and its complete BRICS. At present time BRICS is five major emerging national economies (B - Brazil, R - Russia, I - India, C - China, S - South Africa). South Africa attended the 2011 BRICS summit in Sanya, China, as a full member.

Q.43.(d) Ashokan inscriptions, refers to himself as "Beloved of the Gods" (Devanampiyadasi).

Brahmi and Kharoshthi scripts were deciphered by British archaeologist and historian James Prinsep.

Q.44.(b) Brahmadeya (given to Brahmin) was tax free land gift either in form of single plot or whole villages donated to Brahmans in the early medieval(600-1200 AD) India.

Q.45.(b) Sathanar is the author of 'Manimekalai'

Q.46.(b) Elephanta Caves are a UNESCO World Heritage Site and a collection of cave temples predominantly dedicated to Hindu god Shiva. They are located on Elephanta Island, or Gharapuri (also known as "the city of caves") Mumbai in the Indian state of Maharashtra. Consists of Shaivism caves and a few Buddhist stupa.

Q.47.(d) His philosophy was similar to the Indian National Congress. He imagined India as Nation State based on individual citizen's rights.

Q.48.(c) Right statements about Impact of tax is:-

A Tax is shifted forward to consumers if the demand is inelastic relative to supply, While If the supply is relatively more inelastic than demand tax is shifted backward to producers.

Q.49.(b) The law of diminishing marginal utility describes a familiar and fundamental tendency of human behavior. "As a consumer consumes more and more units of a specific commodity, the utility from the successive units goes on diminishing". Mr. H. Gossen, a German economist, was first to explain this theory in 1854. Alfred Marshal later on detailed this theory.

Q.50.(b)

Q.51.(b) The olive ridley sea turtle, also known as the Pacific ridley sea turtle, is a medium-sized species found in warm and tropical waters, primarily in the Pacific and Indian Oceans along the Bay of Bengal is Orissa.

Q.52.(c)

Q.53.(a) The Phoenix Settlement, established by Gandhiji near Durban, South Africa in 1904.

Q.54.(a) The Vijayanagar Empire("City of Victory") was situated in the Deccan Plateau region banks of the Tungabhadra River, in South India. It was established in 1336 by Harihara I and his brother Bukka I of Sangama Dynasty.

Q.55.(a)

Q.56.(c) The composition of Abhidhamptik was composed by Moghaliputtatisy in the third Buddhist council at Pataliputra. At this time the kingdom of Magadha was Mauryan ruler Ashoka .

Q.57.(d) The Buddhist stupa known as a sacred space. Mauryan ruler Ashoka played an important role in formation the Stupa.

Q.58.(a)

State **No. of seats in Legislative Assembly**

West Bengal-	294
Bihar-	243
Tamilnadu-	234
Madhya Pradesh-	230

Q.59.(b) The Governor issues ordinance under Article 213. Ordinance will be issued only when State Vidhanmandal is not in session, but as soon as State Vidhanmandal comes in session, it will have to pass by both Houses or Vidhansabha within 6 weeks. Maximum time of intervals between two sessions of State Vidhanmandal is 6 months, so the maximum duration of ordinance

is considered to be 6 months. The Governor issue Or Returns Ordinance With the President's Permission.

- Q.60.(a)** SWIFT was founded in Brussels in 1973 and was supported by 239 banks in fifteen countries. It started to establish common standards for financial transactions and a shared data processing system and worldwide communications network. Its Headquarters is:- La Hulpe, Belgium.
- Q.61.(d)** The Indo-Tibetan Border Police (ITBP) is one of the five Central Armed Police Forces of India, raised on 24 October 1962. It is basically a mountain trained force. It replaces Assam rifles in Sikkim and Arunachal in 2004-05 for border guarding duty. It presently has 56 service battalions.
- Q.62.(d)**
- Q.63.(c)** The full form of VVPAT is Voter Verifiable Paper Audit Trail. The Voter Verified Paper Audit Trail is a method that provides feedback to voters. It is an independent verification printer machine and is attached to electronic voting machines. It allows voters to verify if their vote has gone to the intended candidate.
- Q.64.(d)** The major objective of PMKSY is to achieve convergence of investments in irrigation at the field level, expand cultivable area under assured irrigation, improve on-farm water use efficiency to reduce wastage of water, enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop), enhance recharge of aquifers and introduce sustainable water conservation practices by exploring the feasibility of reusing treated municipal waste water for peri-urban agriculture and attract greater private investment in precision irrigation system.
- Q.65.(d)**
- Q.66.(a)**
- Q.67.(c)** Lymph is clear or white fluid that travels through vessels, moves within tissues and work to keep all the parts of the body clean.
- Q.68.(b)** All amphibians have three chambered heart. In reptiles, Except for crocodilians, which have a four-chambered heart, all have a three-chambered heart consisting of two atria and one ventricle.
- Q.69.(a)** Accumulation of Lactic acid in the muscles of sprinters leads to cramps.
- Q.70.(c)**
- Q.71.(c)** Pension Fund Regulatory and Development Authority (PFRDA) has increased the maximum age of joining under NPS-Private Sector (i.e. All Citizen and Corporate Model) from the existing 60 years to 65 years of age in November 2017.
- Q.72.(d)** The Reserve Bank of India has recently constituted a high level task force on Public Credit Registry (PCR) to suggest a road map for developing a transparent, comprehensive and near-real-time PCR for India. This task force is headed by Y.M. Deosthalee.
- Q.73.(a)**
- Q.74.(a)** The India Post Payments Bank (IPPB) has been incorporated as a public sector company under the

Department of Posts with 100% GOI equity. IPPB has launched on January 30th, 2017 in Ranchi and Raipur.

- Q.75.(d)**
- Q.76.(b)**
- Q.77.(c)** If a political party is treated as a recognised political party in four or more States, it shall be known as a 'National Party' throughout the whole of India, but only so long as that political party continues to fulfill thereafter the conditions for recognition in four or more States on the results of any subsequent general election either to the House of the People or to the Legislative Assembly of any State.
- Q.78.(b)** Antrix Corporation Limited (ACL), Bengaluru is a wholly owned Government of India Company under the administrative control of the Department of Space. Antrix Corporation Limited was incorporated as a private limited company owned by Government of India in September 1992 as a Marketing arm of ISRO for promotion and commercial exploitation of space products, technical consultancy services and transfer of technologies developed by ISRO.
- Q.79.(b)**
- Q.80.(b)** Caesium is used as a timekeeper in atomic clocks.
- Q.81.(a)** Potassium is involved in the control of water content of the blood.
- Q.82.(a)** Aqueous carbon dioxide, CO₂ (aq), reacts with water forming carbonic acid, H₂CO₃ (aq).
- Q.83.(c)** Magnesium is responsible for the formation of chlorophyll in green plants.
- Q.84.(b)**
- Q.85.(a)** Argon gas is used in fluorescent and incandescent light bulbs to stop the oxygen in the light bulbs from corroding the hot tungsten filament. The use of argon in light bulbs prevents the evaporation of the tungsten filaments, which results in increased light bulb life.
- Q.86.(d)**
- Q.87.(d)** Sound waves cannot travel through a wooden hollow pipe placed in vacuum.
- Q.88.(a)** Value of one nanometer is 10⁻⁷ cm.
- Q.89.(c)**
- Q.90.(c)** Working of a safety fuse depends upon the magnitude and heating effect of the current.
- Q.91.(a)**
- Q.92.(b)** The World Soil Day (WSD) is observed every year on December 5 to communicate messages on the importance of soil quality for food security, healthy ecosystems and human well-being. The 2017 theme is "Caring for the Planet starts from the Ground". It is celebrated annually at the Food and Agriculture Organization (FAO) headquarters in Rome, the regional offices and through national and local events.
- Q.93.(b)** H S Prannoy has won the men's singles title at the 82nd Senior National Championship Senior National Badminton Championships in Nagpur, Maharashtra on November 8, 2017.

UPSC CDS (I)

Q.94.(a) A barbarian is a human who is perceived to be either uncivilized or primitive.

Q.95.(d)

Q.96.(a) Francisco Pelsaert was a Dutch merchant who worked for the Dutch East Indies Company, who became most famous as the commander of the ship Batavia, which ran aground in the Houtman Abrolhos off the coast of Western Australia in June 1629.

Q.97.(a) Ginans - are devotional hymns or poems recited by Shia Ismaili Muslims.

Ziyarat - is a form of pilgrimage to sites associated with Muhammad, his family members and descendants

Raag - A raga is a musical mode in the Indian classical music tradition used in an improvised performance.

The Shahada is an Islamic creed declaring belief in the oneness of God and the acceptance of Muhammad as God's prophet.

Q.98.(a) The alvars, 'those immersed in god' were Tamil poet-saints of South India who espoused bhakti (devotion) to the Hindu Supreme god Vishnu or his avatar Krishna in their songs of longing, ecstasy and service

Q.99.(c) correct ascending order –

AIRFORCE

*Marshal of the Air Force

Air Chief Marshal

Air Marshal

Air Vice Marshal

Air Commodore

Group Captain

Wing Commander

Squadron Leader

Flight Lieutenant

Flying Officer

Q.100.(c) The Attorney General for India is appointed by the President of India under Article 76(1) of the Constitution of India and holds office during the pleasure of the President. He must be a person qualified to be appointed as a Judge of the Supreme Court.

The Attorney General is responsible for giving advice to the Government of India upon such legal matters and to perform such other duties of legal character as may be referred or assigned to him by the President.

The Attorney General has the right of audience in all Courts in India as well as the right to participate in the proceedings of the Parliament, though not to vote. The Attorney General appears on behalf of Government of India in all cases (including suits, appeals and other proceedings) in the Supreme Court in which Government of India is concerned.

The Attorney General is assisted by a Solicitor General and four Additional Solicitors General. The Attorney General is to be consulted only in legal matters of real importance and only after the Ministry of Law has been consulted. All references to the Attorney General are made by the Ministry of Law.

Q.101.(b) Q.102.(b) Q.103.(d) Q.104.(b) Q.105.(a)

Q.106.(d) Sufism is a mystical form of Sunni Islam whose members pursue a spiritual experience using bodily discipline and mystical intuition. The sect also incorporates ecstatic experiences and the veneration of Muslims or saints. The word Sufi comes from the Arabic word for wool because early followers wore robes of coarse white wool. In medieval times Sufis were also known as dervishes (their Persian name) and fakirs, both of which mean "poor brother."

Q.107.(b) Q.108.(d) Q.109.(d) Q.110.(c) Q.111.(b)

Q.112.(b)

Q.113.(b) Indian women's hockey team won the 2017 Asia Cup hockey title. In the final match held at Kakamigahara in Japan, India defeated China by 5-4 goals in penalty shootout. With this victory, India qualified for 2018 World Cup and women's hockey team win closely follows victory of men's side in October 2017. It was India's second Women's Asia Cup title and first one was won in 2004.

Q.114.(d)

Q.115.(d)

Q.116.(a) 91st amendment act states that the size of the council of ministers and in the respective state governments should not be more than 15% (Fifteen Percent) of the total members of lower house (i.e. 15% strength of Lok Sabha in the parliament and 15% strength of lower houses of respective states legislatures (the minimum strength in the case of small states (Sikkim, Mizoram, Goa) is being 12 due to lower strength of the Legislative assembly of that states) Sikkim - 32, Mizoram - 40, Goa - 40

91st Amendment act of Indian constitution also state that person who is disqualified under anti-defection law (Schedule 10th of Indian constitution) shall not be appointed as a minister nor hold and remunerative political post from the period of disqualification

Before the 91st amendment act Prime Minister under his discretion can appoint any number of members in his council of ministers

With this 91st amendment act the prime minister can't appoint the any number of ministers into his council

Q.117.(b) The Indian Coast Guard is a multi-mission organization, conducting round-the-year real-life operations at sea. Despite being relatively small, it has a wide range of task capabilities for both surface and air operations. The organization is headed by the Director General Indian Coast Guard (DGICG) exercising his overall command and superintendence from the Coast Guard Headquarters (CGHQ) located at New Delhi.

Q.118.(c) Nirbhay', a two-stage missile, is 6-metre long, 0.52 metre wide and with a wingspan of 2.7 metre. It can carry the designated warhead at a speed of 0.6 -0.7 Mach. Its launch weight is about 1500 kg.

Q.119.(d)

Q.120.(b)

ELEMENTARY MATHEMATICS ANSWERS

Q.1.(a) $\cos x + \cos^2 x = 1$

$$\cos x = 1 - \cos^2 x = \sin^2 x$$

$$\text{Now, } \sin^2 x + \sin^4 x = \cos x + \cos^2 x \\ = 1$$

Q.2.(c) $(\sin A + \cos A) = p$ ----- (1)

Taking cube on both the sides, we get

$$\sin^3 A + \cos^3 A + 3 \sin A \cos A (\sin A + \cos A) = p^3$$

$$q + 3 \sin A \cos A (\sin A + \cos A) = p^3$$

$$q + 3(p - q) = p^3$$

$$p^3 - 3p + 2q = 0$$

Q.3.(d)

$$x = \frac{\sec^2 \theta - \tan \theta}{\sec^2 \theta + \tan \theta}$$

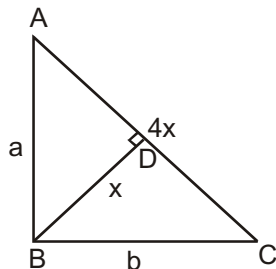
$$= \frac{\frac{1}{\cos^2 \theta} - \frac{\sin \theta}{\cos \theta}}{\frac{1}{\cos^2 \theta} + \frac{\sin \theta}{\cos \theta}}$$

$$= \frac{1 - \cos \theta \sin \theta}{1 + \sin \theta \cos \theta} = \frac{2 - \sin 2\theta}{2 + \sin 2\theta}$$

we know that, $-1 \leq \sin 2\theta \leq 1$

$$\text{so, } \frac{1}{3} \leq x \leq 3$$

Q.4.(a&c)



$$\frac{1}{2} \times a \times b = \frac{1}{2} \times 4x \times x$$

$$ab = 4x^2$$

$$2ab = 8x^2$$

$$a^2 + b^2 = 16x^2 \text{ ----- (1)}$$

$$(a+b)^2 = 16x^2 + 8x^2 = 24x^2$$

$$a+b = 2\sqrt{6} x \text{ ----- (2)}$$

$$a-b = 2\sqrt{2} x \text{ ----- (3)}$$

on adding (2) and (3), we get

$$2a = 2x (\sqrt{6} + \sqrt{2})$$

$$a = x (\sqrt{6} + \sqrt{2})$$

From (2)

$$b = x (\sqrt{6} - \sqrt{2})$$

$$\tan C = \frac{a}{b} = \frac{\sqrt{6} + \sqrt{2}}{\sqrt{6} - \sqrt{2}} = 2 + \sqrt{3}$$

$$a+b = 2\sqrt{6} x \text{ ----- (4)}$$

$$a-b = -2\sqrt{2} x \text{ ----- (5)}$$

on adding (4) and (5), we get

$$2a = 2x (\sqrt{6} - \sqrt{2})$$

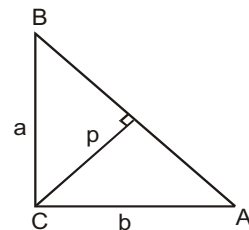
$$a = x (\sqrt{6} - \sqrt{2})$$

From (4)

$$b = x (\sqrt{6} + \sqrt{2})$$

$$\tan C = \frac{a}{b} = \frac{\sqrt{6} - \sqrt{2}}{\sqrt{6} + \sqrt{2}} = 2 - \sqrt{3}$$

Q.5.(a)



$$\frac{1}{p^2} = \frac{1}{a^2} + \frac{1}{b^2}$$

$$\frac{1}{p^2} = \frac{b^2 + a^2}{a^2 b^2}$$

$$a^2 b^2 = p^2 (a^2 + b^2)$$

Q.6.(a)

$$\text{Volume of the cone} = \frac{1}{3} \pi r^2 h$$

$$= \frac{1}{3} \pi \times 5^2 \times (\sqrt{13^2 - 5^2})$$

$$= \frac{1}{3} \pi \times 25 \times 12$$

$$= 100\pi \text{ cm}^3.$$

Q.7.(a)

$$\pi R^2 = A$$

$$\frac{\pi R^2}{4} = A_1 = A_2$$

$$A_1 + A_2 = \frac{\pi R^2}{4} + \frac{\pi R^2}{4}$$

$$= \frac{\pi R^2}{2} = \frac{A}{2}$$

$$\text{Remaining area} = A - \frac{A}{2} = \frac{A}{2}$$

Q.8.(d)

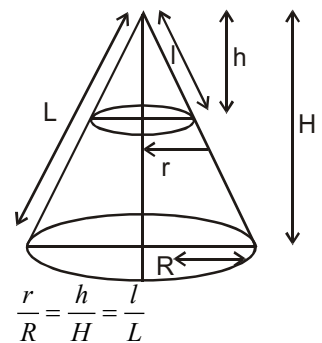
$$r : l = 1 : 3$$

Required ratio

$$= \frac{\pi r (l + r)}{\pi r l} = \frac{3 + 1}{3}$$

$$= 4 : 3$$

Q.9.(b)



$$\frac{r}{R} = \frac{h}{H} = \frac{l}{L}$$

$$\frac{V_1}{V_2} = \frac{\frac{1}{3} \pi r^2 h}{\frac{1}{3} \pi R^2 H}$$

$$\frac{64}{125} = \left(\frac{r}{R} \right)^3$$

$$\frac{r}{R} = \frac{4}{5}$$

Ratio between C.S.A

$$= \frac{\pi r l}{\pi R L}$$

$$= \left(\frac{r}{R} \right)^2 = \frac{16}{25}$$

Required ratio = 16 : 9

Q.10.(c)

Required cost

$$= \frac{((10)^2 - \sqrt{3} - 16)}{2} \times 100$$

$$= \frac{(100 - \sqrt{3} - 16)}{2} \times 100$$

$$= \frac{(84 - \sqrt{3})}{2} \times 100$$

UPSC CDS (I)

$$= \frac{84-1.732}{2} \times 100 = 4113.4$$

Q.11.(b) $r_2 > r_1$

$$p_1 = \frac{r_1+1}{r_1} = \frac{r_1}{r_1} + \frac{1}{r_1} = 1 + \frac{1}{r_1}$$

$$p_2 = \frac{r_2+1}{r_2} = 1 + \frac{1}{r_2}$$

$$r_2 > r_1$$

$$\frac{1}{r_2} < \frac{1}{r_1}$$

$$p_2 < p_1$$

Q.12.(c) Volume = $\frac{1}{3} \pi r^2 h$

$$= \frac{1}{3} \pi a^2 \times 2a$$

$$= \frac{2}{3} \pi a^3$$

Q.13.(c) Length of transverse common tangent

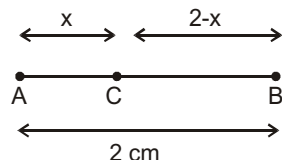
$$= \sqrt{10^2 - (4.5 + 3.5)^2}$$

$$= \sqrt{10^2 - 8^2} = 6 \text{ cm.}$$

Q.14.(b) $\frac{4}{3} \pi r^3 = 4 \pi r^2$

$$r = 3 \text{ cm.}$$

Q.15.(d)



$$AC^2 = AB \times BC$$

$$x^2 = 2 \times (2-x)$$

$$x^2 + 2x - 4 = 0$$

$$x = \frac{-2 \pm \sqrt{4+16}}{2}$$

$$= \frac{-2 \pm 2\sqrt{5}}{2} = (-1 \pm \sqrt{5})$$

$$x = \sqrt{5} - 1 \text{ cm.}$$

Q.16.(d) $5^{17} + 5^{18} + 5^{19} + 5^{20}$

$$= 5^{17} (5^0 + 5^1 + 5^2 + 5^3)$$

$$= 5^{17} (5 + 25 + 125)$$

$$= 156 \times 5^{17} = 12 \times 13 \times 5^{17}$$

It means the expression is

Q.17.(c)

divisible by 13.

$$a+b = 2c$$

$$a-c = c-b$$

Now,

$$\frac{a}{a-c} + \frac{c}{b-c}$$

$$= \frac{a}{c-b} + \frac{c}{b-c}$$

$$= \frac{a}{c-b} - \frac{c}{c-b} = \frac{a-c}{c-b} = 1$$

Q.18.(b)

$$z = x^{\frac{1}{c}}$$

$$= \left(\frac{1}{y^a} \right)^{\frac{1}{c}}$$

$$= y^{\frac{1}{ac}}$$

$$z = \left(z^{\left(\frac{1}{b} \right)} \right)^{\frac{1}{ac}}$$

$$z = z^{\frac{1}{abc}}$$

On comparing both sides we get

$$\frac{1}{abc} = 1$$

$$abc = 1$$

Q.19.(c)

$$2b = a+c$$

$$b+b = a+c$$

$$b-c = a-b$$

$$\text{Now, } x^{a-b} y^{c-a} z^{a-b}$$

$$= (xz)^{a-b} y^{c-a}$$

$$= y^{2(a-b)} y^{c-a}$$

$$= y^{2a-2b+c-a}$$

$$= y^{2b-2b}$$

$$= y^0 = 1$$

Q.20.(d)

Decimal expansion of an irrational number is non-terminating and non-repeating

Q.21.(b)

Let the roots be α and $\frac{1}{\alpha}$

$$\alpha \times \frac{1}{\alpha} = \frac{r}{p}$$

$$p = r$$

Q.22.(a)

$$65x - 33y = 97 \text{ ----- (1)}$$

$$33x - 65y = 1 \text{ ----- (2)}$$

On adding (1) and (2)

$$98x - 98y = 98$$

$$x-y = 1 \text{ ----- (3)}$$

$$(1) - (2)$$

$$32x + 32y = 96$$

$$x+y = 3 \text{ ----- (4)}$$

On adding (3) and (4) we get

$$x = 2, y = 1$$

$$xy = 2 \times 1 = 2$$

Q.23.(a)

$$\frac{b}{y} + \frac{z}{c} = 1, \frac{x}{a} = 1 - \frac{c}{z}$$

$$\frac{b}{y} = 1 - \frac{z}{c} = \frac{c-z}{c}, \frac{x}{a} = \frac{z-c}{z}$$

$$\text{Now, } \frac{ab+xy}{bx} = \frac{ab}{bx} + \frac{xy}{bx}$$

$$= \frac{a}{x} + \frac{y}{b}$$

$$= \frac{z}{z-c} + \frac{c}{c-z}$$

$$= \frac{z-c}{z-c} = 1$$

Q.24.(c)

$$\frac{a^2-1}{a} = 5$$

Taking cube on both the sides, we get

$$\frac{a^6-1-3a^2 \cdot 1(a^2-1)}{a^3} = 125$$

$$\frac{a^6-1-3a^2 \cdot 5a}{a^3} = 125$$

$$\frac{a^6-1}{a^3} - 15 = 125$$

$$\frac{a^6-1}{a^3} = 140$$

Q.25.(c)

$$x+y+z = 0$$

On taking $x=y=k$ and $z = -2k$

$$(y+z-x)^3 + (z+x-y)^3 + (x+y-z)^3$$

$$= (k-2k-k)^3 + (-2k+k-k)^3 + (k+k+2k)^3$$

$$= -8k^3 + (-8k^3) + 64k^3$$

$$= 48k^3$$

$$= -24 k.k (-2k)$$

Q.26.(a) $x+3=0=x-3$

Then, $x^3+3x^2+4x+k=0$

$-27+27-12+k=0$

$k=12$

Q.27.(b) The required number = 1024

Q.28.(b) On putting $x=1$ in the given polynomial

$3x^3+4x^2-7=3+4-7$

$=0$

i.e. $x=1$ satisfies the given polynomial.

Hence, $x=1$ is a zero of the given polynomial

Q.29.(a) L.C.M = 3003

H.C.F. = 21

Let numbers be $21x$ and $21y$

$21x \times 21y = 21 \times 3003$

$xy = 143$

means $x=11, y=13$

Sum of the numbers = $21 \times 24 = 504$

Q.30.(c) If α and β be the roots of the equation $ax^2+bx+c=0$

Then, $\alpha + \beta = -\frac{b}{a}$ ----- (1)

$\alpha\beta = \frac{c}{a}$ ----- (2)

$(\alpha+1)(\beta+1) = \alpha\beta + \alpha + \beta + 1$

$= \frac{c}{a} - \frac{b}{a} + 1 = \frac{c-b+a}{a}$

Q.31.(b) Speed upstream = $x-y$

Speed downstream = $x+y$

According to question

$\frac{d}{x-y} + \frac{d}{x+y} = z$

$d \left(\frac{x+y+x-y}{x^2-y^2} \right) = z$

$d \times 2x = z(x^2-y^2)$

$d = \frac{z(x^2-y^2)}{2x}$

Q.32.(c) Any two out of S1, S2 and S3 are sufficient.

Q.33.(c) According to question

$\frac{2 \times 60 \times y}{60+y} = 48$

$48 \times 60 + 48y = 120y$

$72y = 48 \times 60$

$y = \frac{48 \times 60}{72} = 40 \text{ kmph}$

Q.34.(a) CP = 100, SP = 132

CP = 120, SP = 132

Profit % = $\frac{12}{120} \times 100 = 10\%$

Q.35.(b) A $\rightarrow 3x$

B $\rightarrow \frac{1}{3} \times \frac{3x}{2} = \frac{x}{2}$

C $\rightarrow \frac{2}{3} \times 3x = 2x$

D $\rightarrow x$

E $\rightarrow \frac{3x}{2}$

According to question

$\frac{11x}{2} - \frac{5x}{2} = 13500$

$\frac{6x}{2} = 13500$

$x = 4500$

Required share = 4×4500

$= 18000$

Q.36.(c) Required angle = $\frac{16.1}{100.1} \times 360^\circ$

$= 57.9^\circ$

$= 58^\circ$

Q.37.(c) $\frac{a+b}{2} = 10$ ----- (1)

$\sqrt{ab} = 8$ ----- (2)

From (1) and (2)

$a = 16, b = 4$

Q.38.(c) 6th observation

$= 6 \times 10.5 + 6 \times 11.5 - 11 \times 11$

$= 6(22) - 11 \times 11$

$= 11(12-11) = 11 \times 1 = 11$

Q.39.(d) $\sin^4\theta - \cos^4\theta = (\sin^2\theta)^2 - (\cos^2\theta)^2$

$= (\sin^2\theta + \cos^2\theta)(\sin^2\theta - \cos^2\theta)$

$= 1 - \cos^2\theta - \cos^2\theta$

$= 1 - 2\cos^2\theta$

Q.40.(b) $\cot 1^\circ \cot 23^\circ \cot 45^\circ \cot 67^\circ \cot 89^\circ$

$= \cot 1^\circ \cot(90^\circ - 67^\circ) \cot 45^\circ \cot 67^\circ \cot(90^\circ - 1^\circ)$

$= \cot 1^\circ \tan 67^\circ \cdot 1 \cdot \cot 67^\circ \tan 1^\circ$

$= 1$

Q.41.(b) Required angle = $\frac{30}{60} \times 10 = 5^\circ$

Q.42.(b) (1) $(\sec^2\theta - 1)(1 - \operatorname{cosec}^2\theta) = \tan^2\theta(-\cot^2\theta)$

$= -1 \neq 1$

(2) $\frac{\sin\theta}{1+\cos\theta} + \frac{1+\cos\theta}{\sin\theta}$

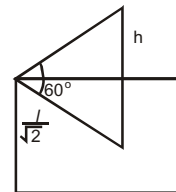
$= \frac{\sin^2\theta + 1 + \cos^2\theta + 2\cos\theta}{\sin\theta(1+\cos\theta)}$

$= \frac{2+2\cos\theta}{\sin\theta(1+\cos\theta)} = \frac{2}{\sin\theta}$

$= 2\operatorname{cosec}\theta$

Only (2) is true.

Q.43.(c)



$\tan 60^\circ = \frac{h\sqrt{2}}{l}$

$\sqrt{3} = \frac{h\sqrt{2}}{l}$

$\frac{h^2 \cdot 2}{l^2} = 3$

$h^2 = \frac{3l^2}{2}$

Q.44.(b) H- 2h units

Q.45.(a) $\sec x \operatorname{cosec} x = 2$

$\frac{1}{\cos x} \cdot \frac{1}{\sin x} = 2$

$\frac{\sin^2 x + \cos^2 x}{\cos x \sin x} = 2$

$\tan x + \cot x = 2$

It is possible only when $x = 45^\circ$

Now, $\tan^n x + \cot^n x$

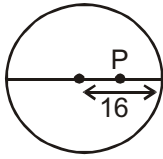
$= \tan^n 45 + \cot^n 45^\circ$

$= (1)^n + (1)^n$

$= 2$

UPSC CDS (I)

Q.46.(a)



The locus of the mid-points of the radii of length 16 cm of a circle is a concentric circle of radius 8 cm.

Q.47.(d) Base radius = $\frac{140}{2} = 70$ cm

According to question,

$$\pi r l = 17600$$

$$\frac{22}{7} \times 70 \times \sqrt{h^2 + r^2} = 17600$$

$$\sqrt{h^2 + r^2} = \frac{17600}{220}$$

$$\sqrt{h^2 + r^2} = 80$$

$$h^2 = 6400 - 4900 = 1500$$

$$h = 10\sqrt{15}$$

Q.48.(c) 2 and 3

Q.49.(b) A circle

Q.50.(d) 2, 3 and 4

Q.51.(c) (1) $\frac{(2n-4)}{n} \times 90^\circ = 90^\circ$

$$2n-4 = n$$

$$n = 4$$

which is correct

(2) Statement (2) is incorrect because the sum is $(2n-4) \times 90^\circ$ or $(2n-4)$ right angles.

Q.52.(b) Let length of side of the square be x cm

Area of square originally = x^2

New area of square = $(x+8)^2$

According to question,

$$(x+8)^2 - x^2 = 120$$

$$x^2 + 64 + 16x - x^2 = 120$$

$$16x = 56$$

$$x = 3.5$$

Q.53.(d) Number of zeroes at the end of the product

$$1 \times 2 \times 3 \times 4 \times \dots \times 23 \times 24 \times 25 = 6$$

largest power of 10 = 10^6

Q.54.(c) Area of walls of five rooms

$$= 2(6+4) \times 2.5 \times 5$$

$$= 20 \times 2.5 \times 5$$

$$= 50 \times 5 = 250 \text{ m}^2.$$

$$\text{Number of cans} = \frac{250}{20} = 12.5$$

Q.55.(d) Number of tiles

$$= \frac{4.5 \times 10 \times 100 \times 100}{(50)^2}$$

$$= 180$$

Number of packets of tiles required

$$= \frac{180}{20} = 9$$

$$\text{Cost} = 9 \times 100 = 900$$

Q.56.(c) Required volume

$$= \left(\frac{2r}{\sqrt{3}} \right)^3 : \frac{4}{3} \pi r^3$$

$$= \frac{8r^3}{3\sqrt{3}} \times \frac{3}{4\pi r^3} = 2 : \sqrt{3}\pi$$

Q.57.(d) According to question

$$\frac{2\pi r}{h} = \frac{3}{1} \Rightarrow h = \frac{2\pi r}{3}$$

C.S.A. of the cone

$$= \pi r \cdot \sqrt{\frac{4\pi^2 r^2}{9} + r^2}$$

$$= \pi r \cdot \frac{r}{3} \sqrt{4\pi^2 + 9}$$

$$= \frac{\pi r^2 \sqrt{4\pi^2 + 9}}{3}$$

Q.58.(c) $2 \times \frac{22}{7} \times 98 =$ Perimeter of the wire

Perimeter of the wire = 616 cm

Length of the side of square

$$= \frac{616}{4} = 154 \text{ cm.}$$

Q.59.(c) $2(p+q+r) < 3(a+b+c)$

Q.60.(b) $3(a+b+c) < 4(p+q+r)$

Q.61.(d) $3y^3 + ky^2 + 5x - 6 = 0$

$$x + 1 = 0$$

$$x = -1$$

putting the value of x in equation.

$$-3+k-5-6=0$$

$$k - 14 = 0$$

For remainder - 7

$$k = 7$$

Q.62.(d)

$$\frac{\sqrt{5}-\sqrt{3}}{\sqrt{5}+\sqrt{3}} - \frac{\sqrt{5}+\sqrt{3}}{\sqrt{5}-\sqrt{3}}$$

$$= \frac{8-2\sqrt{5}}{2} - \frac{8+2\sqrt{15}}{2}$$

$$= \frac{1}{2}(-4\sqrt{15}) = -2\sqrt{15}$$

$$\frac{1}{1+\frac{x^b}{x^a}+\frac{x^x}{x^a}} + \frac{1}{1+\frac{x^a}{x^b}+\frac{x^c}{x^b}}$$

$$\frac{1}{1+\frac{x^a}{x^c}+\frac{x^b}{x^c}}$$

$$= \frac{x^a}{x^a+c^b+x^c} + \frac{x^b}{x^a+xb+x^c} + \frac{x^c}{x^a+x^b+x^c}$$

$$= \frac{x^a+x^b+x^c}{x^a+x^b+x^c} = 1$$

Q.65.(a) -5 or 4

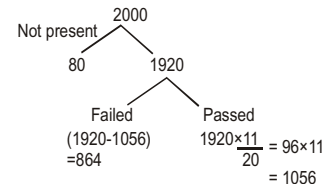
Q.66.(b) Old price New price

$$\frac{100}{125}$$

Required %

$$= \frac{25}{125} \times 100 = 20\%$$

Q.67.(b)



$$Q.68.(c) 0.\bar{9} = \frac{9}{9} = 1$$

Required difference = $1 - 0.9 = 0.1$

Q.69.(c) A : B = 1 : 2

$$B : C = 3 : 4$$

$$C : D = 2 : 3$$

$$A : B : C : D = 6 : 12 : 16 : 24 = 3 : 6 : 8 : 12$$

$$A : B : C : D = 3 : 6 : 8 : 12$$

$$D : E = 3 : 4] \times 4$$

$$A : B : C : D : E = 3 : 6 : 8 : 12 : 16$$

$$B : E = 6 : 16 = 3 : 8$$

Q.70.(c) $10w \times 12 = 5M \times 8$

$m : w = 3 : 1$

$10w \times 12 = (6w + 3m) d$

$10 \times 1 \times 12 = (6 + 3 \times 3) d$

$d = \frac{120}{15} = 8 \text{ days}$

Q.71.(c) $\frac{200 \times 50}{\frac{1}{4}} = \frac{x \times 100}{\frac{3}{4}}$

$x = 300$

Extra men required = $300 - 200 = 100$

Q.72.(c) Distance = speed \times time

Length of train = $60 \times \frac{15}{18} \times 30 = 500 \text{ m}$

Q.73.(c)

A	B	C
x	x-20	x+20

$x + x - 20 + x + 20 = 120$

$x = 40$

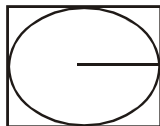
$B = x - 20 = 20$

Q.74.(a)

Q.75.(b) Total profit
 $= \frac{5000 \times (0.5) \times 2}{100} = 50$

Q.76.(b) Area of disk = πr^2

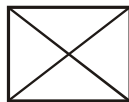
$d = \frac{2}{\sqrt{\pi}}$



$\pi \left(\frac{2}{2\sqrt{\pi}} \right)^2 = \frac{\pi}{\pi} = 1 \text{ unit}^2$

Q.77.(b) $d^2 = 50$

$(a\sqrt{2})^2 = 50$



$a = \sqrt{25} = 5 \text{ unit}$

Q.78.(b) Total surface area

$= 2\pi rh + 2\pi r^2 = 352$

$= 2\pi r(h+r) = 352$

$2 \times \frac{22}{7} \times r(10+r) = 352$

$r^2 = 10r - 56 = 0$

$r = -14, +4$

diameter = 8 cm.

Q.79.(d) Diagonal $a\sqrt{2} = 6\sqrt{2}$ $a = 6$

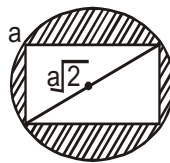
Perimeter of square = $4x = 24$

Perimeter of square = Perimeter of triangle

side of equilateral triangle = 8

Area of $b = \frac{\sqrt{3}}{4}(8^2) = 16\sqrt{3} \text{ cm}^2$

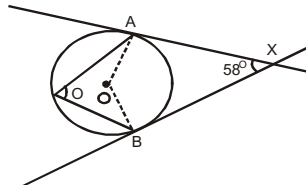
Q.80.(d) Required area = Area of circle - Area of square



$\pi \left(\frac{a\sqrt{2}}{2} \right)^2 - a^2$

$= \frac{\pi a^2}{2} - a^2 = \frac{1}{2} a^2 (\pi - 2)$

Q.81.(b)



$\angle AOB = 180 - 50$

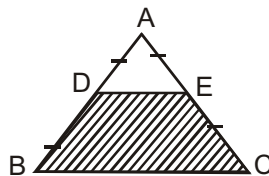
$= 130$

Then

$\angle ACB = \frac{130}{2} = 65^\circ$

Q.82.(c)

Q.83.(a)



DE \parallel BC and DE = $\frac{1}{2}$ BC

{Mid point theorem}

Then Required area

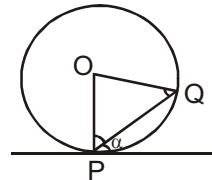
$\frac{\sqrt{3}}{4} l^2 - \frac{\sqrt{3}}{4} \left(\frac{l}{2} \right)^2$

$= \frac{\sqrt{3}}{4} l^2 \left(1 - \frac{1}{4} \right)$

$= \frac{\sqrt{3}}{4} l^2 \times \frac{3}{4}$

$= \frac{3\sqrt{3}}{16} l^2$

Q.84.(b)

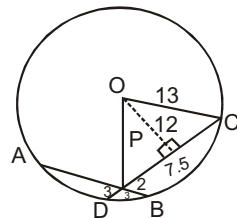


$\angle POQ = \angle OQP = (90 - \alpha)$

$\angle POQ = 180 - 2(90 - \alpha)$

$= 2\alpha$

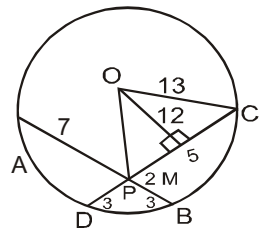
Q.85.(d)



OC = 13

Draw a perpendicular on PC
Then $\triangle OMC$ is right angle triangle

Then



MC = 5 and

OM = 12

PM = 2 {7-5=2}

Then

$OP^2 = 12^2 + 2^2 = 148$

$OP = \sqrt{148} = 2\sqrt{37} \text{ cm}$

Q.86.(c) F+S = $25 \times 2 = 50$

Present age of son = 17-7 = 10 year

F = 50-10 = 40

After 10 year F = 40+10 = 50

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Q.87.(c) $\frac{M_1 D_1}{W_1} = \frac{M_2 D_2}{W_2}$

$$\frac{5 \times 5}{5} = \frac{50 \times x}{100}$$

$x = 10$

Q.88.(a) $A = \left(1 + \frac{r}{100}\right)^n$

$$10000 = P \left(1 + \frac{25}{100}\right)^3$$

$$10000 = P \left(\frac{5}{4}\right)^3$$

$$P = 80 \times 64 = \text{Rs. } 5120$$

Q.89.(a) $0.459459459 \dots$

$$= 0.\overline{459}$$

$$= \frac{459}{999} = \frac{17}{37}$$

Q.90.(c) $(4-3.75)\% = 64$

$$.25\% = 64$$

$$25\% = 6400$$

$$100\% = 6400 \times 4 = \text{Rs. } 25600$$

Q.91.(a) $\log_{10} m < m^2 < m < m^{-1}$

Q.92.(a) $W_{(1)} \quad D_{(4)} \quad S_{(5)}$
 $1 \quad 2+2+2+2 \quad 6+6+6+6+6$

$$\text{Total } 1+8+30 \dots \dots \dots 39000$$

$$39 \dots \dots \dots 39000$$

$$\text{Share of widow 1} \dots \dots 1000$$

Q.93.(d) $3^{\text{rd}} \text{ number} = \text{H.C.F of } 286, 770$
 $= 22$

$$1^{\text{st}} \text{ no.} = \frac{286}{22} = 13$$

$$2^{\text{nd}} \text{ no.} = \frac{770}{22} = 35$$

$$\text{sum} = 22+13+35 = 70$$

Q.94.(B) Let the present age of women = $10+y$

Then the present age of her husband = $10y+x$

$$10y+x - (10x+y)$$

$$= \frac{1}{11}(10x+y+10y+x)$$

$$9y - 9x = (x+y)$$

$$8y = 10x$$

$$\frac{x}{y} = \frac{8}{10} = \frac{4}{5}$$

$$\frac{x}{y} = \frac{8}{10} = \frac{4}{5}$$

$$\text{Age of women} = 45$$

$$\text{Age of her husband} = 54$$

$$\text{Difference of age} = 9 \text{ year}$$

Q.95.(a) $\frac{3(l_1 + l_2)}{s_1 + s_2} = \frac{(l_1 + l_2)}{(s_1 - s_2)}$

$$3(s_1 - s_2) = (s_1 + s_2)$$

$$2s_1 = 4s_2$$

$$s_1 : s_2 = 2 : 1$$

Q.96.(c) When 5 is multiplied in any odd number always gives unit place

5 so unit place of given expression is 5

Q.97.(b) $A \quad B$

$$C : T \quad C : T$$

$$2 : 3 \quad 3 : 4$$

$$20 \text{ kg } A = 8 \text{ kg copper} + 12 \text{ kg tin}$$

$$28 \text{ kg } B = 12 \text{ kg copper} + 16 \text{ kg tin}$$

$$\text{Total} = 20 \text{ kg copper} + 28 \text{ kg tin}$$

$$\frac{20+x}{28} = \frac{6}{7}$$

$$x = 4 \text{ kg}$$

Q.98.(a) $ax^2 + bx + c = 3$

$$\text{when } x = 0$$

$$\text{then } c = 3$$

$$\text{when } (x-1) = 0$$

$$x=1$$

$$ax^2 + bx + 3 = 6$$

$$a+b = 6-3 = 3$$

Q.99.(c) 47 49 51 53 55 56 57 58 59

$$\text{Largest integer} = 59$$

Q.100.(a) Sum of age of new 5 students

$$= 18.5 \times 20 - 15 \times 19$$

$$= 370 - 285$$

$$= 85$$

$$\text{Average}$$

$$= \frac{85}{5} = 17$$



TOP NOTCH CAPTIVATORS OF THE MONTH

1



Stree Swabhiman Initiative is launched to ensure and maintain perfect health for Women.

6



Tanzania has decided to withdraw from UN refugee programme for reasons of security and lack of funds.

2



R.K. Singh inaugurates 'Indian Power Stations 2018' - International Conference on Operations and Maintenance.

7

India was ranked at the 62nd place among emerging economies on an Inclusive Development Index.



3



Maharashtra Govt. has approved Nanaji Deshmukh Krishi Sanjivani Yojna, a Rs.4,000-crore project aimed at promoting climate-resilient agriculture.

8

The Competition Commission of India (CCI) has imposed Rs.136 crore fine on Google for unfair business practices in Indian market for online search.



4



The Union Government has inked \$250 Million Loan Agreement with Asian Development Bank (ADB) to Improve Rural Connectivity in 5 States.

9

India has won Under-19 ICC World Cup 2018 by defeating Australia.



5



The ASEAN-India Commemorative Summit was held in New Delhi to celebrate the 25th anniversary of the establishment of sectoral dialogue between two sides.

10

India ranked 177 in the Environmental Performance Index (EPI) – 2018.



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